

A/UX Reference Summary and Index

Release 3.0

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A/UX Reference Summary and Index

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About This Manual

This manual is one of the secondary A/UX reference manuals. It supplements each of the three primary manuals: A/UX Command Reference, A/UX Programmer's Reference, and A/UX System Administrator's Reference. The A/UX Reference Summary and Index is designed to help you find information in the other reference volumes.

The reference books cited above, from which A/UX Reference Summary and Index is derived, are encyclopedic collections of manual pages, not narrative or tutorial works. They provide complete technical information about all the programs, utilities, and standard file formats included with your A/UX system.

Because all of these reference manuals are not intended to be tutorials or learning guides, they should not be the first A/UX books you read. If you are new to A/UX or are unfamiliar with a specific functional area (such as the Finder), you should first read A/UX Essentials and the other A/UX user guides. After you have worked with A/UX, the reference manuals can help you understand new features or refresh your memory about features you already know. This manual, A/UX Reference Summary and Index, further assists you by providing several ways to find exactly the information you want.

Locating information in the reference manuals

You can locate information in the reference manuals with the help of the following sections in each of the primary reference manuals:

- Table of contents. Each reference manual contains one general table of contents for the entire manual. Located at the beginning of each new section of manual pages is a detailed table of contents. (If a section must span from one binder to another, a tailored table of contents is provided for each of the subdivisions.) The general table of contents lists the sections covered in the complete manual. The detailed table of contents lists the manual pages contained within one section (or section subdivision) along with a brief description of the A/UX provision that is covered in each manual page.
- Query commands. The man, what is, and apropos commands display on-screen all the information contained in a manual page or just the information in the "Name" section of one or more manual pages that

satisfy a search criterion. A section that appears later in this preface, "Using the Online Documentation," tells you how to use the online versions of the manual pages.

- This book, A/UX Reference Summary and Index. This separate manual is considered part of the A/UX set of reference manuals, but it is not a "standard" resource like the other reference materials. Its primary purpose is to help you locate the manual pages you need. From its summaries, you might also occasionally find all the information you required. It contains the following subsections:
 - "Commands by Function." This subsection classifies the A/UX user and system administrator commands by the general or most important function each performs. The summary gives you a broader view of the commands that are available and the context in which each is often used. Each command is mentioned just once in this listing.
 - "Command Synopses." This subsection is a compact collection of syntax descriptions for all of the commands in A/UX Command Reference and in A/UX System Administrator's Reference. It may help you find the syntax of commands more quickly when the syntax is all you need.
 - "Index." The index lists key terms associated with A/UX subroutines and commands. These key terms can help you locate the manual page you need as you browse through keyword-related commands and subroutines.

Using this manual

This manual contains three parts, separated by tab dividers. Each part is to be used differently.

Commands by function

With A/UX you are confronted with a multitude of commands. To help you sort them out, the first section of this book is a command summary. It groups commands together according to the functions they perform. Each command is mentioned just once in the summary, in accordance with its general, or most important, function. This way you get a bird's-eye view of the overall command capabilities of A/UX.

This command summary mentions all the user commands in A/UX Command Reference and A/UX System Administrator's Reference. The commands are categorized under headings such as "Logging In and Logging Out" and

"Formatting Text Into Pages for Printing."

To locate the commands for a function or task that interests you, first consult the list of major categories given at the start of the summary section. It lists the principal heads under which commands are grouped. When you find the appropriate major category, turn to the starting page indicated. There you will find lists of A/UX commands for functions and tasks within the major category.

A mention of a command in this summary typically looks like:

change login password.....passwd

To change a password, you are directed to the passwd command. The brief function description ("change login password" in this example) applies to the command (passwd).

Command synopses

Most tasks require that you enter information on the command line after the name of the command, such as flag options that modify the behavior of the command. Often you must supply other arguments as well, such as the names of files. Each man page includes a syntax synposis that helps you construct command lines.

This section gathers into one place all the synopsis sections from sections 1, 1M, 5, 6 and 8 of A/UX Command Reference, A/UX Programmer's Reference, and A/UX System Administrator's Reference. It helps you find the syntax of commands quickly and is helpful when the syntax is all you need to see. The synopses are presented in alphabetical sequence by command name. Left and right guide words at the top of each page indicate the first command and the last command covered on that page.

Index

The A/UX references contain a large amount of information, so finding a specific fact in them can be a daunting task. The Index section is designed to help you locate specific man pages by providing cross-references to them from a variety of topic headings.

Most manual pages are indexed under more than one topic heading; for example, lorder(1) is included under "archive files," "sorting," and "cross-references." This way you are more likely to find the reference you are looking for on the first try.

The Index section works like an ordinary index, except that a short description is included along with each reference. This description, plus the index topic help you quickly determine whether a reference contains the information you want. Once you determine that you want to view a manual page, the parenthetical section number helps you find the correct book in which to look. Suppose you have located a reference to adduser(1M). The sections that appear in each of the reference manuals are listed on the book front cover and spine. Section 1M appears on the spine of A/UX System Administrator's Reference. Accordingly, that is where you can find the full text of adduser(1M). Also, see "Using the Online Documentation," later in the preface.

The key terms in this index were constructed by examining the meaning and usage of the A/UX manual pages. They are designed to be more discriminating and easier to use than the traditional permuted index, which mechanically lists keywords found in the manual page NAME sections.

Visual conventions for the A/UX reference manuals

A/UX books follow specific styling conventions. For example, words that require special emphasis appear in specific fonts or styles. This section describes the conventions used in all the A/UX reference books.

The Courier font

Throughout the A/UX reference manuals, words that appear on the screen or that you must type exactly as shown are in the Courier font.

Here's an example:

Type date on the command line and press RETURN.

This instruction means that you should type the word "date" exactly as shown, then press the RETURN key.

After you press RETURN, text such as this will appear on the screen:

```
Fri Nov 1 11:15:43 PST 1991
```

In this case, the Courier font is used to represent exactly what appears on the screen.

All A/UX manual page names are shown in the Courier font. For example, 1s(1) indicates that 1s is the name of a manual page that occurs in Section 1. More information about the use of the Courier font in manual pages is given in "Styling of A/UX Command Elements" later in this preface.

Font styles

Italics are used to indicate that a word or set of words is a placeholder for part of a command line. Here is a sample command syntax illustration:

The italicized term *file* is a placeholder for the name of a file. If you wanted to display the contents of a file named Elvis, you would type the filename Elvis in place of *file*. In other words, you would enter

Styling of A/UX command elements

A/UX commands are entered in accordance with their command syntax. A typical A/UX command line includes the command name first, followed by options and arguments. For example, here is an illustration of the syntax for the wc command:

In this syntax illustration, wc is the command, -1 and -w are options, and *file* is an argument.

A "command option" modifies the action of a command, often by changing its mode of operation (such as read mode or write mode).

An "argument" is any element that follows the command name. Command arguments other than command options typically specify the objects upon which the command should act. You often supply the names of files that you want a command to process, so *file* is frequently the last element in syntax illustrations.

Brackets and ellipsis characters in a syntax illustration should be considered part of a syntax notation. This is represented by the use of body font instead of Courier for these characters. Their font treatment tells you that you are not supposed to type these characters as part of the command line. Their meaning as a syntax notation is described next.

The brackets enclose an optional item or a group of optional items. If an optional item has constituent parts that are also optional, these parts are themselves enclosed in brackets, as in this syntax illustration:

```
lpr [-i [numcols]]
```

This syntax illustration shows that the indent (-i) command option can be followed by the number of columns to indent the printed page. It also shows that

you can omit the number of columns; if you do, the 1pr command uses the default indent value.

An ellipsis (...) follows an argument that can be repeated any number of times on a command line. If the ellipsis follows a bracketed group of items, the group of items can be repeated any number of times on the command line.

Mutually-exclusive command options cannot be specified within the same command-line request. For commands that have mutually-exclusive options, two or more command-line syntaxes are offered:

```
pax -r[other-option-for-archive-reading]...
pax -w[other-option-for-archive-writing]...
```

Outside of syntax illustrations, command options are shown with a leading hyphen also in the Courier font. When you supply multiple command options in an actual command line, only one leading hyphen is normally required. For example the following command line contains two options, -r and -f:

```
pax -rf /dev/rfloppy0
```

In the example, the -f option (pronounced 'minus f') is entered without its own hyphen, even though when mentioned in running text it appears with a leading hyphen.

Using the online documentation

In addition to the paper documentation in the reference manuals, A/UX provides several ways to search and read the contents of each manual page from your A/UX system. An advantage to the online version of the documentation is that the computer performs the work of filtering out (or skipping) all the manual pages other than the one you specifically queried. The only prerequisite is that you already know its name (or a proper search string). However, you don't have to know how manual pages are organized by section numbers and by book titles.

To display a manual page on your screen, enter the man command followed by the name of the manual page you want to see. For example, to display the manual page for the cat command, including its description, syntax, options, and other pertinent information, you would enter

```
man cat
```

After the first screen of the text of a manual page appears, you can display subsequent screens of the text with each press of the SPACE BAR, until you reach

the end of the man page. To display subsequent text one line at a time, press RETURN instead of the SPACE BAR. By pressing Q, you can quit the man command before viewing all of the manual page.

To display the descriptive information in the "Name" section of any manual page, enter the whatis command followed by the name of the provision you want described. In the following example, the command prompt is the percent sign, and the provision that is being queried is the 1s command:

```
% whatis 1s \label{eq:linear_state} $1s(1)$ - lists the contents of a directory $ \blacksquare
```

To display a list of all manual pages whose "Name" sections contain a given keyword or string, enter the apropos command followed by a search word or search string enclosed in double quote characters. The names of A/UX provisions are listed on separate lines along with the descriptive information in the "Name" section of the manual page that describes those provisions. Sometimes several A/UX provisions are listed on the same line. In those cases, several A/UX provisions are described on a single manual page. You can tell which of these names is the formal name for the manual page because it will be followed by parentheses and an enclosed section number. In the following example, the command prompt is the percent sign, and the A/UX provisions that are queried are those which are described in manual pages whose "Name" section contains the word "tape":

```
% apropos tape
mt(1) - magnetic tape manipulating program
frec(1M) - recover files from a backup tape
mtio(7) - interface conventions for magnetic tape devices
tc(7) - Apple Tape Backup 40SC device driver
% ■
```

These documentation query commands are described more fully in the manual pages man(1), whatis(1), and apropos(1) in A/UX Command Reference.

For more information

To find out where you need to go for more information about how to use A/UX, see *Road Map to A/UX*. This guide contains descriptions of each A/UX guide and ordering information for all the guides in the A/UX documentation suite.

Commands by Function

This section lists all A/UX commands categorized by the functions they perform. The major functional categories appear in bold type. These major categories begin on the pages shown following:

Accessing the System and Its Help Resources	4
Managing Files and Directories	6
Controlling the User Interface	10
Controlling How Commands Are Run	$\dots\dots\dots11$
Managing Processes as They Run	13
Generating Command Lines	13
Communicating	14
Playing Games	16
Processing Text as Records Within a Database	17
Processing Structured or Unstructured Text	18
Processing Text to Produce Printed Documents	$\dots\dots\dots 20$
Processing Plotter Drawings	23
Writing Shell Programs	24
Programming	25
Administering Your System	28

Each category includes one or more subcategories. While the category appears in bold text, the subcategory appears in plain text. Under each subcategory are the related functions.

To find a command that can count words in a file, you might follow this sequence of actions:

- **1.** Locate "Processing Structured or Unstructured Text" (page 18) as the most appropriate main category.
- 2. Turn to page 18 and browse through the pages following until you locate "Report Occurrences of Words and Letters" as the next most appropriate subcategory.
- 3. Locate the phrase word count as the function desired.
- **4.** Locate the command we across from the phrase word count.

Once you have found a command likely to perform a desired function, you can get further information about that command by referring to the A/UX Command Reference and A/UX System Administrator's Reference. An even faster way to

locate information is to use the online help provisions of A/UX. (See "Using the Online Documentation" in the preface.)

Normally, the names of manual page subdocuments are the same as the names of the commands they describe. This is not true when a manual page subdocument describes more than one command. An example is rmdir, which is described on the rm(1) manual page. You can use the whatis command to help you locate the actual manual page for more information about a given command. Another way to locate the rm(1) manual page for commands like rmdir is to enter rmdir as the argument to the man command. The man command automatically locates the rm(1) manual page and displays it.

The categories are listed in no special order. Generally, the order of subcategories is alphabetical. The order of command names and descriptions is generally alphabetical as well, based on the command name.

The uses of some commands fit several categories. For example, the command fits equally well within two categories, "Performing Arithmetic Calculations" and "Interpreting Command Lines." To make the summary brief, however, each command is listed under only one classification. Note also that rarely-used commands are interspersed among frequently-used commands, falsely suggesting that each command is equally useful.

Also, the manual pages cited for a specific category may not provide an adequate overview of a given topic. For example, the cited commands for "Directing Data To and From Files," tee and cat, do not provide adequate guidance about input and output redirection. Redirection is best described in other A/UX books, such as A/UX Shells and Shell Programming. (The following manual pages from the A/UX Command Reference also describe input and output redirection: sh(1), csh(1), and ksh(1).)

Finally, certain categories are necessarily nondescript, such as "Using Devices." Since you are using devices whenever you use A/UX, all commands could have been placed in this category. However, only those commands more concerned with manipulating devices than manipulating files or data were placed in this category. The chief concern for the choice of category titles was finding titles that are clear when considered with the other categories. Accordingly, the category titles taken by themselves often fail to describe precise sets of commands.

If you are confident using Macintosh applications but uncertain about the added value that A/UX can provide, the following categories are likely to interest you.

Accessing the System and Its Help Resources. This topic includes many subcategories of general interest and commands that are likely to be used with medium frequency. Of these, the most frequently used commands are the commands used to obtain online help.

Managing Files and Directories. This topic includes the most frequently used commands in the system. When managing large numbers of folders and files,

A/UX command lines may be preferable to Finder operations. For example, command lines can be used to manipulate files in a nested folder without having to use a prior operation to "open" the nested folder.

Controlling How Commands Are Run. Among the commands listed are those that allow you to schedule commands to run in a recurring fashion, or in a time-delayed fashion.

Communicating. This topic includes commands that support the popular UNIX utility for electronic mail. To use the mail facilities of A/UX optimally, you could even create customized scripts that automatically start up according to specific dates and times. (See "Writing Shell Programs" and "Controlling how Commands are Run.")

Processing Structured or Unstructured Text. The editors are frequently used to edit database style tables, such as /etc/passwd, as well as to edit document text. TextEditor is the editor of choice if you wish to take advantage of your Macintosh skills. The grep command is a frequently used A/UX utility that displays lines in any text file containing a string or substring you specify.

Processing Text Records. Within certain limits, the commands listed here can process information from files generated with Macintosh spreadsheet and database applications once they are saved as text. Another powerful provision, but one that is categorized differently from these, is awk. It is a high-level programming language used to write programs that process text or compile custom reports from field-structured text files.

Writing Shell Programs. The A/UX shell programming languages are frequently used to automate recurring tasks or to bind several related actions into an easily-invoked command script. The shells allow users to easily create new A/UX functions, extending the repertoire of existing programs in ways that fit the needs of a particular site. A number of the supplied A/UX programs are actually shell scripts, so they can be readily copied and customized.

Accessing the system and its help resources

Finding out about your network
displays a list of the active users from all of the systems on the local network
displays the host status of local machinesruptime
produces a login list for local machines (RPC version) rusers
Finding out about your system
displays a summary of the current system activity w
displays group memberships groups
displays identification information about the current system uname
displays information about the users on a system finger
displays login and logout times for each user of the systemlast
displays the system page sizepagesize
displays user and group IDs and namesid
provide truth values about processor type machid
reports a list of the users who are logged on to the system users
reports how long system has been up uptime
Finding out about your session
displays the value of variables set in the current
environmentprintenv
gets the login namelogname
obtains the device filename for the terminal or CommandShell window where it is invoked tty
prints the name of the working directory
reports process statusps

Getting online help
displays the named manual page entries
informs you of the current system activitywhodo
locates commands by keyword apropos
prints effective current user IDwhoami
reports a brief description for the manual page entry specified whatis
reports the directory path to a file by interpreting PATH and alias settingswhich
reports the locations of the source, binary, and online help files for a specified command
reports users who are currently logged in to the system who
Logging in and logging out
changes the login password passwd
logs in to a remote systemrlogin
logs you into a new group newgrp
signs you on a terminal session login
Derforming erithmetic colculations
Performing arithmetic calculations
desk calculator
prints the prime factor of a given number factor
processes an arbitrary-precision arithmetic language
rescales quantities according to a the unit of measure specified units
Using devices
blocks data to 8K for direct input to /dev/rmt/tcxtcb
clears the terminal screen
ejects a diskette from the drive eject
manipulates magnetic tape media
prepares data to be printed on the Apple ImageWriter II printer iw2
sets the modes for a terminalstty
sets the tab stops on a terminaltabs

Using time and date utilities	
displays a calendar	cal
displays and sets the date	
provides a reminder service	endar
reminds you when you have to leave	leave
Managing files and directories	
Changing file attributes	
change the owner or group of a file	chgrp
change the owner or group of a file	chown
changes the permissions of a file	chmod
sets attributes for Macintosh files, such as file type and creator	tfile
updates access and modification times of a file	
Comparing files and directories	
compares the contents of two directories	ircmp
compares the difference between two large files that are too big for diff to handle	bdiff
compares three versions of a file	diff3
compares two files or directories for any differences	.diff
compares two files	cmp
merges three files into one	merge
reports differences between two files or directoriesucl	bdiff
reports side-by-side differences between two files in a side-by-side format	sdiff
reports the differences between three filesucbo	diff3
sums and counts the characters within the files of the given	umdir

Compressing and encrypting files compress and expand files.....pack compress and expand files......pcat compress and expand filesunpack compress and uncompress files compact compress and uncompress files uncompact compress files and directories as well as expand them; support concatenation, browsing, and filecomparing operations upon compressed filescompress compress files and directories as well as expand them: support concatenation, browsing, and filecomparing operations upon compressed filescompressdir compress files and directories as well as expand them; support concatenation, browsing, and filecomparing operations upon compressed filesuncompress compress files and directories as well as expand them; support concatenation, browsing, and file-comparing operations upon compressed files uncompressdir compress files and directories as well as expand them; support concatenation, browsing, and file-comparing operations upon compressed fileszcat compress files and directories as well as expand them; support concatenation, browsing, and file-comparing operations upon compressed files zcmp compress files and directories as well as expand them; support concatenation, browsing, and file-comparing operations upon compressed fileszdiff compress files and directories as well as expand them; support concatenation, browsing, and file-comparing operations upon compressed fileszmore encodes and decodes passwords crypt

Copyi	ng mes and directories
co	nverts a file in one storage format to a different storage format fcnvt
co	nverts and copies a file
co	pies files between two systemsrcp
co	pies files to or from a cpio archive
co	pies files to or from a tar archive tar
cc	pies files to or from a tp archive tp
co	pies files to or from an archive in an IEEE formatpax
co	pies filescp
m	akes linkslr
sp	lits a file into a specified number of pieces split
sp	lits files into sections
Creati	ng, renaming, and removing files and directories
cr	eates a directory mkdir
m	oves or renames filesmv
re	move files or directoriesrn
re	move files or directoriesrmdir
Direct	ing data to and from files
ca	tenates and displays the contents of files
tra	unscribes datatee
Dienle	lying filenames and file status
•	lculates a checksumsun
	termines the type of a file $file$
	ts the contents of a directory
re	ports version number of filesversion

Finding files	
finds files find	£
Finding out about your file system	
reports the used and unused storage capacity for a file system d	f
summarizes disk usage	u
Looking at files	
displays the first few lines of a file head	£
displays the last part of a filetai	1
show the contents of a file in display-size chunks more	e
show the contents of a file in display-size chunks pag	е
shows the contents of a file in display-size chunks po	g
Printing files	
cancels print requests spooled through the 1p command cance	1
queries the print spooler for progress information	q
removes jobs from the line printer spooling queue for a Berkeley file system (4.2)	m
spools print requests to printers	р
spools print requests to printers	r

Controlling the user interface

Choosing session preferences
changes the default login shell
logs you in to A/UX by using a graphical user interface Login
manages command-interpretation windows and moderates access to the A/UX console window
Customizing the Macintosh system for one user account
create a personal System Folder systemfolder
Interpreting command lines
discontinues a csh login session (a function built into ksh) logout
discontinues command interpretation in the current shell (as a function built into the shell)exit
evaluates its arguments as a command line a specified number of times (as a function built into the shell)repeat
evaluates its arguments as a command line and then exits shell (a function built-into the shell)exec
evaluates its arguments as a command line as a function built into the shelleval
manages the layering of multiple shells
runs the Bourne shellsh
runs the C shell, a command interpreter with C-like syntax csh
runs the Korn shell, an enhanced command interpreter that is backward-compatible with the Bourne shell (sh)
ksh
Launching Macintosh applications
runs a Macintosh binary application in A/UXlaunch

Controlling how commands are run

Delaying a command or part of a shell script
suspends the system for a specified interval of time sleep
Establishing the environment for a Macintosh application
changes or displays the fields of the 'SIZE' resource of a file
convert between Macintosh encoding and International Standards Organization (ISO) encodingisotomac
convert between Macintosh encoding and International Standards Organization (ISO) encoding mactoisc
Establishing the execution environment for a command
ulimit
changes the current working directory as a function built into the shell
changes the root directory for a command
displays or resets default file permissions as a function built into the shellumask
executes a command at low prioritynice
generates y entries in response to requests for inputyes
invokes to a shell on a remote system remsh
runs a command so that it can continue to run even after your session has ended
sets the environment for command execution env
Interpreting command lines while maintaining an audit trail
starts a shell that records terminal input and outputscript

Setting a time at which to run a command

aids in the use of the cron process scheduling programcro	ontab
run commands at a later time	at
run commands at a later time	oatch
runs the clock daemon	. cron

Managing processes as they run

Signaling and terminating processes	
removes interprocess communications facilitiesi	pcrm
terminates a process	kill
Timing the duration of a process	
prints the elapsed time during the execution of a command	time
reports the elapsed, user, and system time during the execution	
of a command t	imex
Generating command lines Constructing and executing command lines	
builds arguments based on the standard input, passing them in batches to the specified command which is executed enough times to deplete all the argumentsx	args
passes its arguments in batches to a command that is run once per every batch a	pply
Constructing command lines using Macintosh dialog boxes	
builds command lines interactively	cmdo

Communicating

Communicating with other users		
displays local news items	. news	
displays the mail header lines in your mailbox	.from	
enables and disables notification of mail by comsat	.biff	
enables you to send and receive messages electronically	mailx	
permits or denies the receipt of messages	.mesc	
send mail to users or read mail	.mail	
talks to another user via the terminal	.talk	
writes to all users	.wall	
writes to another user	write	
Using AppleTalk		
allows you to choose a default printer on the AppleTalk internetat_ch	o_prr	
displays status information from an AppleTalk device ats	tatus	
looks up network-visible entities (NVEs) registered on the AppleTalk network system	ookup	
transfers data to a printer by using AppleTalk protocols at	print	
Using TCP/IP		
assigns a serial line to a network interface	.slip	
communicates with another host via the TELNET protocol t	elnet	
displays the status of machines on the local network (RPC version)	rup	
distributes remote files	rdist	
responds to requests to use the DARPA Trivial File Transfer Protocol	tftpc	
transfers files by using the DARPA Internet File Transfer Protocol (FTP)	ftp	
transfers files via the Trivial File Transfer Protocol (TFTP)		
writes to all users over a network	rwall	

Using UUCP

	controls uucp jobs and provides status information uustat
	copies files from one system to another systemuucp
	displays information about uucp file transfersuulog
	displays the names of systems to which uucp and cu can connect
	displays the service grades that are available on your system uuglist
	provide an easy interface to the uucp command, using the public directories
	provide an easy interface to the uucp command, using the public directories
	runs a command on a remote system
	sends a file to a remote host
Usi	ing other communications tools
	encode and decode a binary file uudecode
	encode and decode a binary file uuencode
	establishes a connection to a remote system
	establishes an interactive connection with another system cu
	invokes the Kermit file-transfer program kermit
	runs login on a dial-up line
	updates files between two machinesupdater

Playing games

animates raindrops	rain
converts Arabic numerals to English	number
generates a maze	maze
gives associative knowledge tests on various subjects	quiz
play the game of tic-tac-toe	cubic
play the game of tic-tac-toe	ttt
plays the game of autorobots	\dots autorobots
plays the game of backgammon	back
plays the game of black jack	bj
plays the game of chase	chase
plays the game of craps	craps
plays the game of cribbage	cribbage
plays the game of fortune telling	fortune
plays the game of Go Fish''	fish
plays the game of growing worm	worm
plays the game of hangman	_
plays the game of hunt-the-wumpus	
plays the game of life	
plays the game of Mastermind	\dots mastermind
plays the game of moo	
plays the game of robots	
plays the game of Space Invaders (A/UX version)	
plays the game of trek	
plays the game of twinkle, twinkle little stars	
plays the game of worms	
provides arithmetic problems	arithmetic
simulates a punched card corresponding to a text argumen	nt bed

Processing text as records within a database

rocessing sorted text records
combines (joins) two relational filesjoin
reports repeated lines in a fileuniq
selects or rejects lines common to two sorted files
rocessing text records and fields
cuts out selected fields of each line of a file
merges lines of several files or subsequent lines of one file paste
removes columns from a file
sorts or merges files sort

Processing structured or unstructured text

Editing text
edit text e
edit text ed
edit text
edit textred
edits big filesbfs
invokes the screen-oriented (visual) display editor vedit
invokes the screen-oriented (visual) display editor vi
invokes the screen-oriented (visual) display editor view
lets you edit files interactively through mouse and menu operations
operations reacteured
Generating custom text transformations
edits a stream of data sed
generates an encryption key makekey
scans a file for lines that match a specific pattern
translates characters tr
Printing poster-size text
generates a large banner
generates a poster banner
Processing tabbed text
changes the format of a text filenewform
expand tabs to spaces, and vice versa expand
expand tabs to spaces, and vice versa unexpand

Reporting occurrences of words or letters

counts characters, words, and lines in a file	WC
finds references in a bibliography	.lookbib
reports character frequencies in a file	freq
search a file for a specific pattern	egrep
search a file for a specific pattern	fgrep
search a file for a specific pattern	grep

Processing text to produce printed documents

Filtering printer motions from text for display purposes
filter text containing printer control sequences for a DASI terminal 300
filter text containing printer control sequences for a DASI terminal
filters special underlining sequences imbedded in text for use at a display deviceul
filters text containing printer control sequences a page at a time 4014
filters text containing printer control sequences for the DASI terminal
filters text containing printer control sequences for use at a display device
filters text for vintage display devicesgreek
filters nroff output for terminal previewingcolcrt
interprets troff output for use at a vintage display device to
Formatting text into pages for printing
converts text files to format for printing enscript
converts troff intermediate format to POSTSCRIPT format psdit
formats a file through troff so it can be printed on a POSTSCRIPT printer
formats and typesets filestroff
formats documents that contain nroff and mm macro formatting requests
formats text for a print devicepr
formats text for a specific phototypesetterotroff
invokes the Autologic APS-5 phototypesetter troff post- processor
prints out all records in a bibliographic databaseroffbik
text formatternroff
typeset documents that contain troff and mm or mv macro- formatting requests
typeset documents that contain troff and mm or mv macro- formatting requests myt

Preparing text with troff markup analyzes the surface characteristics of documents......style builds an inverted index for a bibliography indxbib creates a subject-page index for a documentndx creates or extends a bibliographic database addbib find spelling errors spell finds and inserts literature references in documents refer generates a list of subjects from documents subj generates a permuted indexptx locate wordy sentences in a documentdiction locate wordy sentences in a document explain sorts bibliographic database sortbib Preprocessing subsidiary markup within troff markup eliminates the source commands from nroff input......soelim folds long lines for finite-width output device................. fold format mathematical text for troffeqn formats mathematical text for nroff negn invokes a pic preprocessor for drawing graphs grap preprocesses troff files that contain drawings......pic produces single spaced output......ssp table formatter for nroff or troff......tbl

Processing plotter drawings

Filt	tering plotter input for display purposes interprets plotter instructions for use at a vintage display device tplot
Pro	ocessing graphics
	draws a graph graph
	interpolates a smooth curve spline

Writing shell programs

Evaluating expresssions to provide true or false results evaluates conditions test provides truth values false provides truth values true		
Evaluating math or string expressions		
echoes its arguments echo		
evaluates arguments as an expression expr		
get part of a pathname basename		
get part of a pathnamedirname		
parses command options getopt		
reverses characters within each line of textrev		
Performing input or output operatations		
posts a Macintosh alert box to query the usermacquery		
prints its arguments as a function built into the Korn (ksh) shell		
queries the user for input query		
queries terminfo database tput		
reads one line from the standard input line		

Programming

Usi	ng Macintosh development tools
	compiles Macintosh resource files from source coderez
	decompiles a resource filederez
Usi	ng other programming tools
	assembles files by translating assembler mnemonics to object code as
	compiles and interprets bs programsbs
	compiles compilers (yet another compiler-compiler) yacc
	compiles regular expressions with a fileregcmp
	converts an object file to Motorola S-record formathex
	converts binary data to a displayable form in octal, decimal, hexadecimal, or ASCII
	creates a shared librarymkshlik
	debugs and executes programs
	debugs executable programsadh
	displays profile data
	displays section sizes of common object files size
	displays the symbol table of a common object filenm
	finds the ordering relation for an object library lorder
	finds the printable strings in an object or other binary file strings
	generates C source code from a remote procedure call (RPC)
	source filerpcger
	generates programs for simple lexical tasks
	invokes the link editor for common object files
	maintains a library of files in an archive ar
	maintains, updates, and regenerates groups of files make
	produces an assembly language listing for a specified file $\dots \dots \text{dis}$
	receives and converts Motorola S-records from a port to a file \ldots revhex
	sorts lines in a file topologically tsort
	stores (saves) selected parts of an object file
	strips symbol and line number information from an object file $\ldots \ldots$ strip
	swaps bytes in COFF files
	symbolic debugger sdb

Using the C language	
creates an error message file by massaging C source programs	mkstr
debugs a C program	ctrace
generates a C flowgraph	cflow
generates a C program cross-reference	cxref
improves spacing and indentation of C source files	cb
indents and formats C program source	indent
invokes a C program checker	lint
invokes the C compiler	co
invokes the C language preprocessor	cpp
maintains a tags file for a C program	ctags
reports strings from C programs to implement shared strings	xstr
Using the Fortran language	
filters the output of Fortran programs for line printing	fpr
interprets ASA carriage control characters	asa
invokes the Extended Fortran Language	efl
invokes the Fortran 77 compiler	£77
splits f77 or ef1 files	
Using unusual programming languages	
processes macros for C and other languages	m/
runs the SNOBOL interpreter	
runs die strobol merpieter	

Using version management (RCS)
checks in RCS revisions
checks out RCS revisions
compares RCS revisionsrcsdift
creates new RCS files or changes attributes of existing RCS files rcs
displays log messages and other information about RCS files rlog
displays RCS keywords and their valuesident
merges two versions of an RCS file
Using version management (SCCS)
builds an RCS file from an SCCS file sccstores
changes the delta commentary of an SCCS delta
combines SCCS deltas
compares two versions of an SCCS file sccsdiff
creates and administers SCCS files admir
displays information about an SCCS fileprs
displays who has checked a Source Code Control System (SCCS)
file out for editing sact
gets a version of an SCCS file get
makes a delta (change) to an SCCS filedelta
manipulates version control information inside a data stream vo
performs SCCS subsystem commandssccs
provides help information about SCCS commands and messages help
removes a delta from an SCCS file rmdel
reports identification information for a file
undoes a previous get of an SCCS file unget
validate SCCS file val

Administering your system

AppleTalk network maintenance		
enables you to configure and display AppleTalk network		
interfacesappletalk		
exercises the AppleTalk network by sending packets to a		
named hostappleping		
Backing up your system		
copies blocks interactivelybcopy		
copies System V File System-style file systems for optimal access time		
copy file systems with label checkinglabelit		
copy file systems with label checking volcopy		
create a dump. bsd archive by making copies of files from		
a given file system		
create a dump.bsd archive by making copies of files from a given file systemrdump		
generates a fast incremental backup for System V file systems $\ldots \ldots$ finc		
helps you with autorecovery administration escher		
recovers files from a backup tape frec		
retrieve files from within a dump.bsd archive into an existing file systemrestore		
updates autorecovery fileseu		
updates important files for autorecovery purposes eupdate		
Examining system status		
calls the error-logging daemon errdemon		
displays kernel name cache statistics		
extracts error records from a crash dump errdead		
prints system factspstat		
processes a report of logged errors errpt		
terminates the error-logging daemon errstop		
turns on/off the reporting of extended errors exterr		

File system maintenance checks file-system consistency and interactively repairs the file system fsck creates an entry in the file-system table fsentry displays the current device namedevnm identifies processes using a file or file structure fuser installs random inode generation numbers fsirand locates the filename associated with an i-number.....ncheck makes a Berkeley 4.2 (UFS) file systemnewfs makes a directory named lost+found to be used by fsckmklost+found mount and unmount file systems mount mount and unmount file systems umount reports the state of a file system fsstat tunes a Berkeley 4.2 (UFS) file system tunefs updates the superblock sync Installing new software installs A/UX software from specially prepared floppy disks ... finstall places files in specified directories install Kernel generation creates an up-to-date kernel autoconfig generates an up-to-date kernelnewconfig manipulates the files that determine the configuration of a new kernel newunix queries kernel files for configuration information module_dump

tunes kernel parameters for work-load optimization kconfig

Mail system maintenance lists the contents of the mail queue mailq rebuilds the database for the mail aliases file......newaliases sends mail sendmail Monitoring system activity displays the system status on the status line of a terminal sysline gathers printer/plotter accounting information pac generates a system activity graph......saq generates disk accounting data by user ID diskusg invoke connect-time accountingacctcon invoke connect-time accounting......acctcon1 invoke connect-time accounting......acctcon2 logs system messages syslogd manipulate connect accounting records fwtmp present an overview of accounting commandsacct provide process accountingacctprc provide shell procedures for accountingacctsh provide shell procedures for accountingdodisk provide shell procedures for accountinglastlogin provide shell procedures for accounting monacct provide shell procedures for accounting prctmp provide shell procedures for accounting prdaily provide shell procedures for accounting prtacct

provide shell procedures for accounting shutacct
provide shell procedures for accounting turnacct
report system activitysa1
report system activitysa2
report system activitysadc
reports interprocess communication facilities statusipcs
reports system activitysar
runs daily accounting runacct
runs startup programs at boot time startup
searches and formats process accounting filesacctcom
summarizes commands from per-process accounting records acctcms
Network File System (NFS) network maintenance
All and a ser Northead of Ellis Contains (NIEC) as a find in the contains of t
displays Network File System (NFS) statistics nfsstat
exports and unexports directories to Network File System (NFS) clients exportfs
exports and unexports directories to Network FIle System (NFS) clients exportfs
exports and unexports directories to Network FIle System (NFS) clients exportfs handle local and remote lock requests lockd
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exports and unexports directories to Network FIle System (NFS) clients exportfs handle local and remote lock requests lockd invoke the NFS daemons biod invoke the NFS daemons nfsd
exports and unexports directories to Network FIle System (NFS) clients exportfs handle local and remote lock requests lockd invoke the NFS daemons biod invoke the NFS daemons nfsd invokes the Network File System (NFS) mount-request server mountd mounts Network File System (NFS) when needed automount provide crash and recovery monitoring for network locking
exports and unexports directories to Network FIle System (NFS) clients exportfs handle local and remote lock requests lockd invoke the NFS daemons biod invoke the NFS daemons nfsd invokes the Network File System (NFS) mount-request server mountd mounts Network File System (NFS) when needed automount provide crash and recovery monitoring for network locking services statd
exports and unexports directories to Network FIle System (NFS) clients exportfs handle local and remote lock requests lockd invoke the NFS daemons biod invoke the NFS daemons nfsd invokes the Network File System (NFS) mount-request server mountd mounts Network File System (NFS) when needed automount provide crash and recovery monitoring for network locking services statd reports RPC information rpcinfo
exports and unexports directories to Network FIle System (NFS) clients exportfs handle local and remote lock requests lockd invoke the NFS daemons biod invoke the NFS daemons nfsd invokes the Network File System (NFS) mount-request server mountd mounts Network File System (NFS) when needed automount provide crash and recovery monitoring for network locking services statd reports RPC information rpcinfo returns information for the spray command sprayd
exports and unexports directories to Network FIle System (NFS) clients exportfs handle local and remote lock requests lockd invoke the NFS daemons biod invoke the NFS daemons nfsd invokes the Network File System (NFS) mount-request server mountd mounts Network File System (NFS) when needed automount provide crash and recovery monitoring for network locking services statd reports RPC information rpcinfo
exports and unexports directories to Network FIle System (NFS) clients

Print spooler maintenance

•
allows 1p requests accept
configures the 1p spooling system
controls the operation of the line printer
enable or disable LP printers disable
enable or disable LP printersenable
filter data for the POSTSCRIPT printers psbanner
filter data for the POSTSCRIPT printers pscomm
filter data for the POSTSCRIPT printers psinterface
filter data for the POSTSCRIPT printerspsrv
filter data for the POSTSCRIPT printers pstext
filter data for the POSTSCRIPT printers transcript
generates a line-printer ripple patternlptest
prevents LP requests reject
prints lp status informationlpstat
start or stop the 1p request scheduler and move requests1pmove
start or stop the 1p request scheduler and move requests 1psched
start or stop the 1p request scheduler and move requests1pshut
supports the Berkeley print spooler
Setting up the system
adds disk blocks to or deletes them from the swap area swap
associates named partitions with device files pname
changes the current A/UX system node name
checks the installation of boards checkinstall
compiles (translates) terminfo files tic
compiles time-zone information files that are required to set the
local time-zonetzic
displays the date and time for one or more time zones tzdump
formats a disk through a driver-dependent format
operationdiskformat
modify the /etc/inittab file in terms of enabling serial ports for use as login terminalstty_add
modify the /etc/inittab file in terms of enabling serial ports for use as login terminalstty_kill

performs disk partitioning
pushes streams line disciplinesline_sane
set or reset the terminal to a sensible state reset
set or reset the terminal to a sensible state tset
set the initial communication modes, such as speed and line discipline, for the purpose of logging users in to A/UX through serial linesapm_getty
set the initial communication modes, such as speed and line discipline, for the purpose of logging users in to A/UX through serial linesgetty
sets or displays the identifier of the current host system hostid
sets or displays the name of the current host system hostname
sets or updates bad block information badblk
sets the characteristics of a serial port setport
sets the keyboard for the console keyset
sets the local time zone settimezone
Starting up and shutting down
displays a progress bar during the A/UX boot
sequence StartMonitor
sequence StartMonitor execute system initialization shell scripts bcheckrc
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts macsysinitrc
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts macsysinitrc execute system initialization shell scripts powerfail
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts macsysinitrc execute system initialization shell scripts powerfail execute system initialization shell scripts rc
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts macsysinitrc execute system initialization shell scripts powerfail execute system initialization shell scripts rc execute system initialization shell scripts system initialization shell scripts system initialization shell scripts systeminitrc
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts macsysinitrc execute system initialization shell scripts powerfail execute system initialization shell scripts rc execute system initialization shell scripts system initialization shell scripts systeminitialization shell scripts syste
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts macsysinitrc execute system initialization shell scripts powerfail execute system initialization shell scripts rc execute system initialization shell scripts system initialization shell scripts system initialization shell scripts systeminitrc
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts powerfail execute system initialization shell scripts powerfail execute system initialization shell scripts rc execute system initialization shell scripts rc execute system initialization shell scripts sysinitrc kills all active processes killall reboots the operating system reboot runs startup programs at boot time startup sends messages to StartMonitor, which displays a progress bar during the A/UX boot process
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts powerfail execute system initialization shell scripts powerfail execute system initialization shell scripts rc execute system initialization shell scripts sysinitrc kills all active processes killall reboots the operating system reboot runs startup programs at boot time startup sends messages to StartMonitor, which displays a progress bar during the A/UX boot process startmsg
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts powerfail execute system initialization shell scripts powerfail execute system initialization shell scripts rc execute system initialization shell scripts sysinitrc kills all active processes killall reboots the operating system reboot runs startup programs at boot time startup sends messages to StartMonitor, which displays a progress bar during the A/UX boot process startmsg spawn general processes init
sequence StartMonitor execute system initialization shell scripts bcheckrc execute system initialization shell scripts brc execute system initialization shell scripts powerfail execute system initialization shell scripts powerfail execute system initialization shell scripts rc execute system initialization shell scripts sysinitrc kills all active processes killall reboots the operating system reboot runs startup programs at boot time startup sends messages to StartMonitor, which displays a progress bar during the A/UX boot process startmsg

	turns off power to the computer	.powerdown
Svs	stem administration tools	
,	builds a device file	mknod
	removes device files from a directory	
	substitutes user ID	
TC	P/IP network maintenance	
	attaches a serial line to a network interface and configures the network interface	.slattconf
	attaches a serial line to a network interface	
	converts Internet addresses to standard form	
	converts RPC program numbers into DARPA protocol port	
	numbers	portmap
	creates or updates the Compressed Serial Line/Internet Protocol (CSL/IP) database	mkslipuser
	displays and modifies the address translation table	arp
	displays network status information	netstat
	displays the current state of the Compressed Serial Line/Internet Protocol (CSL/IP) database	
		.dslipuser
	displays the Ethernet address of each Ethernet card in	
	your system.	.etheraddr
	exercises the TCP/IP network by sending Internet Control Message Protocol (ICMP) packets to a named host	
		ping
	interactively queries name servers	nslookup
	invokes a server for kernel statistics	rstatd
	invokes the network routing daemon	routed
	invokes the network rwall server	rwalld
	invokes the remote shell server	remshd
	invokes the remote user communication server	talkd
	invokes the system status server	rwhod
	manages network interfaces	ifconfig
	manipulates the routing tables	route
	prints a readable description of TCP trace records	trpt

provide Internet File Transfer Protocol (FTP) service ftpd
provides Internet domain name servicenamed
runs on a remote system to log you inremlogin
server for remote executions rexecd
server for remote logins
starts Internet servers when neededinetd
supports the DARPA standard TELNET protocol telnetd
rusers invokes a server for users rusersd
User account maintenance
adds a user account adduser
changes the real-name field of your password file entry for use by
fingerchfn
check the password/group files grpck
check the password/group files pwck
edits the password filevipw
handles requests from remote systems for user information from finger fingerd
UUCP network maintenance
checks the uucp directories and files
cleans up files in the uucp spool directoryuudemon.cleanup
contacts a remote system with debugging on
handles remote mail received via UUCP rmail
handles requests from remote systems to run commandsuuxqt
handles the transfer of files by uucico over TCP/IP connections
mails current uucp work status to the uucp
administratoruudemon.admin
processes spooled uucp requests uudemon.hour
removes old files from the uucp spool directoryuucleanup
schedules uucp file transfers
sets up polling for selected systems uudemon.poll
transfers files as specified by uucp work files uucico

Name Information Server (NIS) maintenance changes a login password on the Network Information displays the host name of a system's Network Information generates a Network Information Service (NIS) dbm file makedbm handle requests to change a password served by the Network Information Service (NIS) yppasswdd initializes Network Information Service (NIS) maps for master and slave serversypinit lists the contents of a Network Information Service (NIS) map ypcat lists the value of a specified key in a Network Information Service (NIS) mapypmatch propagates changed Network Information Service (NIS) maps yppush rebuilds the Network Information Service (NIS) maps ypmake reports the version of a Network Information Service (NIS) map that is on an NIS serveryppoll reverses the netgroup file revnetgroup sets ypbind to a particular domain and Network Information transfers a Network Information Service (NIS) map to the local systemypxfr

Command Synopses

```
300
    300 [+12] [-half-line-units] [-dtab-delay, line-delay, char-delay]
    300s [+12] [-half-line-units] [-dtab-delay, line-delay, char-delay]
300s
    See 300.
4014
    4014 [-ccolumns] [-n] [-plines[i] [1 [-t] [file]
450
    450
accept
    accept destinations
acct
    acctdisk
    acctdusg [-p file] [-u file]
    accton [file]
    acctwtmp reason
acctcms
    /usr/lib/acct/acctcms[-a[-o][-p]][-c][-j][-n][-s][-t]
    file...
acctcom
    acctcom[-a][-b][-C sec][-e time][-E time][-f][-g group]
    [-h] [-H] factor [-i] [-I] chars [-k] [-L] line [-m] [-m] pattern
    [-0 \text{ ofile}] [-0 \text{ sec}] [-q] [-r] [-s \text{ time}] [-s \text{ time}] [-t] [-u \text{ user}] [-v]
    [file]...
acctcon
    acctcon1 [-1file] [-ofile] [-p] [-t]
    acctcon2
```

acctcon1 acctsh

acctcon1 See acctcon. acctcon2 See acctcon. acctdisk See acct. acctdusq See acct. acctmerg acctmerg[-a][-i][-p][-t][-u][-v][file]... accton See acct. acctprc acctprc1 [ctmp] acctprc2 acctprc1 See acctprc. acctprc2 See acctprc. acctsh chargefee login-name number ckpacct [amt] dodisk [-o] [filesys]... lastlogin monacct *month* nulladm *name* prctmp [recfile]... prdaily[-1][-c][mmdd] prtacct file [heading] shutacct [reason] startup

turnacct on | off | switch

acctwtmp apropos

```
acctwtmp
    See acct.
adb
    adb [-k] [-w] [object-file [core-file]]
addbib
    addbib[-a][-p prompt-file] database
adduser
    adduser [-a address] [-c] [-d dir] [-g group] [-h home] [-i]
    [-p home-phone] [-r real-name] [-s shell] [-u lowest] [-U uid]
    [-x extension] [login-name]...
admin
    admin [-aname-or-gid] [-doption[value]] [-ename-or-gid]
    [-foption[value]][-h][-i[name]][-m[mrlist]][-n][-rrelease[.level]]
    [-t[descriptive-text]] [-y[comment]] [-z] file...
ae
aliens
    aliens
apm_getty
    See getty.
appleping
    appleping net-node [packet-size [npackets]]
    appleping name:type[@zone] [packet-size [npackets]]
appletalk
    appletalk [-b hardware-interface] [-c] [-d] [-i interface] [-n]
    [-p][-s][-u][-z]
apply
    apply [-aesc-char] [-args-per-batch] command argument...
apropos
```

apropos search-string...

```
ar
    ar -dp [1] [v] archive file...
    ar -mp[1][v][position archivefile] archive file...
    ar -qp [c] [1] [v] archive file...
    ar -rp [c] [1] [u] [v] [position archivefile] archive file...
    ar -tp[s][v] archive file...
    ar -xp[1][s][v] archive file...
arithmetic
    arithmetic[+][-][x][/][range]
arp
    arp host
    arp -a [kernel] [memory-interface]
    arp -d host
    arp -f file
    arp -s host ethernet-address [status]
arp
as
    as [-A factor] [ -m ] [ -n ] [-o object-file] [ -R ] [ -V ]
    [ -68030 ] [ -68040 ] [ -68851 ] file
asa
    asa [file]...
ascii
    cat /usr/pub/ascii
at
    at time [day] [+ increment]
    at -1 [job-number]...
    at -r job-number...
    batch
atlookup
    atlookup[-d][-r nn][-s ss][-x][object[:type[@zone]]]
    atlookup -z[-C]
atprint
    atprint [printer-name[:printer-type[@zone]]]
```

atstatus basename

atstatus

```
atstatus [object [:type [@zone]]]
```

at_cho_prn

```
at_cho_prn [type[@zone]]
```

autoconfig

```
autoconfig [-a] [-b module-directory] [-d init-scripts-directory] [-i base-kernel] [-I] [-k] [-1 linker] [-L loadfile] [-m master-directory] [-M master-file] [-o kernel-file] [-s startup-scripts-directory] [-S script] [-t timeout] [-V] [-V] autoconfig -D [-i base-kernel] [-V] [-V] autoconfig -c [-V] [-V]
```

automount

```
automount [-D environment-variable=value] [-f master-file] [-m] [-M mount-directory] [-n] [-tl duration] [-tm interval] [-T] [-v] [directory map [-mount-options]]...
```

autorobots

autorobots

awk

```
awk [\negFfield-separator] 'pattern-action...' [[\negV] variable=value]... [file]... awk [\negf awk-source-file] [\negFfield-separator] [[\negV] variable=value]... [file]...
```

back

back

badblk

badblk[-r]/dev/rdsk/c?d?s?[blkno]...

banner

banner string...

banner7

banner7 [-w [width]] [text]

basename

basename string [suffix]
dirname string

batch cal

```
batch
    See at.
bc
    bc [-c] [-1] [file]...
bcd
    bcd text
bcheckrc
    See brc.
bcopy
    bcopy
bdiff
    bdiff file1 file2 [lines-per-segment] [-s]
bfs
    bfs[-] file
biff
    biff [switch]
biod
    See nfsd.
Ъj
    bj
brc
    brc
    bcheckrc
    macsysinitrc
    powerfail
    rc
    sysinitrc
bs
    bs [file [argument]...]
cal
    cal [[month] year]
```

calendar checkcw

```
calendar [-]
cancel
    cancel [printer]
    cancel [id]...
cat
    cat [-] [-e] [-s] [-t] [-u] [-v [file]...
cb
    cb [-j] [-1 line-length] [file]...
    cb [-j] [-s] [file]...
CC
    cc[-A factor][-a][-B string][-c][-C][-Dsymbol[=def]][-E]
    [-fm68881][-F][-g][-Idir][-1x][-L dir][-n][-o outfile][-0]
    [-p][-P][-R][-s][-S][-t[p012al]][-T][-Usymbol][-v]
    [-W \ c, arg1[, arg2]... \ [-X][-Y][-Zflags][-68030][-68040]
    [-68851] [-#]... file...
ccat
    See compact.
cdc
    cdc [-m[mrlist]] -r SID [-y[comment]] file...
cflow
    cflow[-dnum][-i][-ix][-r] file...
changesize
    changesize [±option] [-mminsize] [-pprefsize] [-v] file
chargefee
    See acctsh.
chase
    chase [nrobots] [nfences]
checkcw
    See cw.
```

calendar

```
checkeq
    See eqn.
checkinstall
    checkinstall ethertalk
checkmm
    checkmm file...
checkmm1
    See checkmm.
checknr
    checknr [-a.x1.y1.x2.y2....xn.yn][-c.x1.x2.x3....xn][-f]
    [-s] [file]...
chfn
    chfn [login-name]
chgnod
    chgnod new-nodename [kernel-file]
chgrp
    See chown.
chmod
    chmod mode file...
chown
    chown owner file...
    chgrp group file...
chroot
    chroot newroot command
chsh
    chsh name [shell]
ci
    ci[-f[rev]][-k[rev]][-1[rev]][-q[rev]][-r[rev]][-u[rev]][-mmsg]
    [-nname] [-Nname] [-sstate] [-t[txtfile]] files
```

```
ckpacct
    See acctsh.
clear
    clear
clri
    clri[-Tfile-system-type] file-system i-number...
cmdo
    cmdo command
    cmdo -o resfile [-n] [-s] command
cmp
    cmp [-1] [-s] file1 file2
CO
    co [-ddate] [-jjoinlist] [-1[rev]] [-p[rev]] [-q[rev]] [-r[rev]] [-sstate]
    [-w[login]] files
col
    col[-b][-f][-p][-x]
colcrt
    colcrt [-] [-2] [file]
colrm
    colrm startcol [endcol]
comb
    comb [-clist] [-o] [-psid] [-s] file...
comm
    comm [-[1][2][3]] file1 file2
CommandShell
    CommandShell[-b macsysinit-pid][-q][-u]
compact
    compact [name]...
    uncompact [name]...
    ccat [file]...
```

compress cron

```
compress
    compress [-b maxbits] [-c] [-f] [-v] [-V] [file]...
    compressdir [compress-flag]... [directory]...
    uncompressdir [uncompress-flag]... [directory]...
    uncompress [-c] [-f] [-v] [-V] [file]...
    zcat [-V] [file]...
    zcmp [cmp-option]... file1 [file2]
    zdiff [diff-option]... file1 [file2]
    zmore [file]...
compressdir
    See compress.
comsat
    comsat
conv
    conv[-][-a][-o][-p][-s]-ttarget file...
ср
    cp [-i] [-r] file1 file2
    cp[-i][-r] file... directory
cpio
    cpio -o [a] [c] [B] [F] [v]
    cpio -i [6] [b] [B] [c] [d] [f] [m] [r] [s] [S] [t] [u] [v] [patterns]
    cpio -p[a][d][l][m][u][v] directory
cpp
    CDD[-C][-Dname[=def]][-Idir][-P][-Uname][-M[prefix]][-Y]
    [ifile [ofile]]
cpset
    cpset [-0] [-0] file directory [mode [owner [group]]]
craps
    craps
cribbage
    cribbage [-e] [-q] [-r] name...
cron
    cron
```

```
crontab
    crontab [file]
    crontab -1
    crontab -r
crypt
    crypt [password]
csh
    csh[-c][-e][-f][-i][-n][-s][-t][-v][-v][-v][-x][-x][arg]...
csplit
    csplit [-f prefix] [-k] [-s] file arg1 [... argn]
ct
    ct [-cdevice-type] [-h] [-ldevice-name] [-sbaud-rate] [-v]
    [-wtime-limit] [-xdebug-level] telephone-number ...
ctags
    ctags [-a] [-u] [-w] [-x] file...
ctrace
    ctrace [-b] [-e] [-f functions] [-ln] [-o] [-p 's'] [-P] [-rf] [-s]
    [-tn][-u][-v functions][-x][file]
cu
    cu [-bbits] [-dhint] [-e] [-cdevice-type] [-o] [-sbaud-rate]
    [-xdebug-level] -1device-name
    cu [-bbits] [-dhint] [-e] [-cdevice-type] [-1device-name] [-o]
    [-sbaud-rate] [-xdebug-level] telephone-number
    cu [-bbits] [-dhint] [-e] [-cdevice-type] [-ldevice-name] [-o]
    [-sbaud-rate] [-xdebug-level] system
cubic
    See ttt.
cut
    cut -clist [-s] [file]...
    cut -f list [-d char] [-s] [file]...
CW
    cw[-d][-fn][-1xx][-rxx][-t][+t][file]...
    checkcw [-1xx][-rxx] file...
```

cxref deroff

```
cxref
```

```
cxref [-c] [-o file] [-s] [-t] [-w[num]] file...
```

daps

```
daps [-b] [-hstring] [-olist] [-r] [-sn] [-t] [-w] [file]...
```

date

date [mmddhhmm[yy]] [+format]

dbx

$$dbx[-c file][-D][-i][-I dir]...[-r][objfile[coredump]]$$

dc

dc [file]

dcopy

dcopy
$$[-an][-d][-ffsize [:isize]][-sX][-v]$$
 input $[-sx][-v]$ output $[-sx][-v]$

đđ

```
dd [bs=n] [cbs=n] [conv=ascii] [conv=ebcdic] [conv=ibm]
[conv=lcase] [conv=noerror] [conv=swab] [conv=sync]
[conv=type, type] [conv=ucase] [count=n] [ibs=n] [if=file]
[multi=in] [multi=in, out] [multi=out] [of=file] [obs=n]
[seek=n] [skip=n]
```

delta

```
delta[-glist][-m[mrlist]][-n][-p][-rSID][-s][-y[comment]] file...
```

derez

```
derez [-c] [-dmacro-assignment]... [-e] [-iinclude-dir]... [-mstring-size] [-p] [-rd] [-umacro]... resource-file [resource-description-file]... derez [-c] -oscope [-dmacro-assignment]... [-e] [-iinclude-dir]... [-mstring-size] [-p] [-rd] [-umacro]... resource-file [resource-description-file]... derez [-c] -somit-scope [-dmacro-assignment]... [-e] [-iinclude-dir]... [-mstring-size] [-p] [-rd] [-umacro]... resource-file [resource-description-file]...
```

deroff

deroff[-mx][-w][file]...

devnm disable

devnm

devnm [mount-point]

dev kill

dev_kill number directory...

đf

```
df -t [-f] [-T fs-type] [fs-reference]...
df -B [-i] [-T fs-type] [fs-reference]...
df -p [-i] [-T fs-type] [fs-reference]...
```

diction

```
diction[-f pfile][-m1][-mm]file...
diction[-m1][-mm][-n]file...
explain
```

diff

diff3

diffmk

diffmk [-] file1 file2 file3

dircmp

dircmp[-d][-s][-wn] dir1 dir2

dirname

See basename.

dis

dis[-d sec][-da sec][-F function][-1 string][-L][-o][-t sec][-V] file...

disable

See enable.

diskformat

diskformat[-cyl start[-[end]]][-dens n][-head 0]floppy-device
 diskformat[-size 532]hard-disk-device

diskusg

diskusg [-i ignlist] [-p pw-file] [-s] [-u outfile] [-v] [file]...

dodisk

See acctsh.

domainname

domainname [domain-name]

đр

dp [-q] [-u] file

dslipuser

dslipuser

đu

du [-a[1]] [-r] [-s] [files]

dump

```
dump [[-a] [-c] [-f] [-g] [-h] [-1] [-o] [-r] [-s] [-t] [-z name]
[[-d number] [+d number] [-n name] [-p] [-t index] [+t index]
[-u] [-z name, number] [+z name]] file...
dump [[-a] [-c] [-f] [-g] [-h] [-1] [-r] [-t] [-z name]]
[[-d number] [+d number] [-n name] [-p] [-t index] [+t index]
[-u] [-v] [-z name, number] [+z name]] file...
```

dump.bsd

```
dump.bsd [Tfstype] [dumplev] [b] [d] [f] [n] [s] [u] [bdfs-arg]...
     fs-reference
dump.bsd [Tfstype] [dumplev] c [d] [f] [n] [s] [u] [dfs-arg]... fs-reference
\verb"dump.bsd" [T$ \textit{fstype}] [\textit{dumplev}] \texttt{F} [\texttt{d}] [\texttt{f}] [\texttt{n}] [\texttt{s}] [\texttt{u}] [\textit{dfs-arg}] ... \textit{floppydev}
dump.bsd [Tfstype] w
dump.bsd [Tfstype] W
rdump [Tfstype] [dumplev] [b] [d] [f] [n] [s] [u] [bdfs-arg]...
     host:fs-reference
rdump [Tfstype] [dumplev] c [d] [f] [n] [s] [u] [dfs-arg]... host:fs-reference
rdump [Tfstype] [dumplev] F [d] [f] [n] [s] [u] [dfs-arg]... host:fs-reference
rdump [Tfstype] w
rdump [Tfstype] W
е
     See ex.
echo
     echo [arg]...
ed
     ed [-] [-p string] [-x] [file]
     red[-][-p string][-x][file]
edit
     See ex.
efl
     efl[-#][-C][-w][file]...
egrep
     See grep.
```

```
eject
    eject [0] [1] [/dev/rdsk/name]
enable
    enable printers
    disable [-c] [-r[reason]] printers
enscript
    enscript [-1] [-2] [-bheader] [-B] [-ffont] [-Fhfont] [-g] [-G] [-h]
    [-k][-K][-1][-Llines][-m][-o][-pout][-q][-r][-R][[-#n]
    [-Cclass] [-Jname] [-Pprinter]] [files]
    enscript [-1] [-2] [-bheader] [-B] [-ffont] [-Fhfont] [-g] [-G] [-h]
    [-k][-K][-l][-Llines][-m][-o][-pout][-q][-r][-R][[-ddest]
    [-nn] [-ttitle] [-w] [files]
env
    env [-] [name=value]... [command args]
environ
    extern char **environ;
eqn
    eqn [-dxy] [-fn] [-pn] [-sn] [-Ttty-type] [-] [file]...
    checkeq [file]...
egnchar
    egn /usr/pub/egnchar [options] [-] files] | troff [options]
    eqn /usr/pub/cateqnchar [options] [-] files] | troff [options]
    negn /usr/pub/eqnchar [options] [-] files] | troff [options]
    eqn -Taps /usr/pub/apseqnchar [options] [-] files] | troff
    [options]
errdead
    /etc/errdead dumpfile [namelist]
errdemon
    errdemon [file]
errpt
    errpt [-dev] [-a] [-e date] [-f] [-p n] [-s date] [file]...
errstop
    errstop [namelist]
```

£77

esch

```
esch [-b] [-c cluster-number] [-f] [-v]
escher
    escher [-y] [-m]
    escher file...
etheraddr
    etheraddr [slot]
eu
    eu file
eupdate
    eupdate
ex
    ex[-][+command][-r][-R][-t tag][-v][-x]file...
    e[-][+command][-r][-R][-t tag][-v][-x]file...
    edit [-] [+command] [-r] [-R] [-t tag [-v] [-x] file...
expand
    expand -a[-tabstop][-tab1, tab2, ..., tabn][file]...
    unexpand [file]...
explain
    See diction.
exportfs
    exportfs
    exportfs -a [-i] [-v] [-o export-options] [-u] [directory-or-file]...
    exportfs -u [-v] directory-or-file...
expr
    expr arguments
exterr
    exterr /dev/devicename [choice]
£77
    f77 [-1] [-66] [-A factor] [-c] [-C] [-E] [-f] [-F] [-g] [-I[24s]]
    [-m][-Ntableentries]... [-ooutput][-0][-onetrip][-p][-R][-S]
    [-u] [-U] [-w] file...
```

```
factor
    factor [number]
false
    See true.
fcnt1
    #include <fcntl.h>
fcnvt
    fcnvt [-f] [-v] [-i start-format] -s input-file output-file
    fcnvt [-f] [-v] [-i start-format] -d input-file output-file
    fcnvt[-f][-v][-i start-format]-t input-file output-file
    fcnvt [-f] [-v] [-i start-format] -p input-file output-file
    fcnvt [-f] [-v] [-i start-format] -b input-file output-file
    fcnvt [-f] [-v] [-i start-format] -m input-file output-file
ff
    ff[-an][-cn][-iinode-list][-I][-I][-mn][-nfile][-pprefix][-s]
    [-u] device-file
fgrep
    See grep.
file
    file[-c][-f ffile][-m mfile] arg...
finc
    finc [-a \ n] [-c \ n] [-m \ n] [-n \ file] disk-device-file device-file
find
    find pathname... expression
finger
    finger [f] [w] [login-or-real-name]...
    finger -i[f][w][login-name]...
    finger -q[f][w][login-name]...
    finger -1 [b] [h] [m] [p] [login-or-real-name]...
    finger [-1] login-or-real-name@host [login-or-real-name@host]...
    finger [-s] @host [@host]...
fingerd
    in.fingerd
```

```
finstal1
    finstall
fish
    fish
fmt
    fmt [file]...
fold
    fold [-width] [file]...
font
    troff -Ttty-type ...
fortune
    fortune
fpr
    fpr
frec
    frec [-freqfile inumber:name...] [-ppath] device-file
freq
    freq [file]...
from
    from [-s sender] [user]
fsck
    fsck -Tfs-type [-y] [-n] [-m timeout] [-s interleave] [-S interleave]
    [-t file] [-q] [-D option]... [-f] [-p passtostart] [svfs-filesystem]...
    fsck -Tfs-type [-b block-number] [-y] [-n] [-m timeout]
    [-p passtostart] [ufs-filesystem]...
fsdb
    fsdb[-?][-o][-pstring][-T4.2][-w] UFS-symbol...
    fsdb[-][-T5.2] SVFS-symbol...
fsentry
    fsentry -t type [-o optlist] [-d dumpfreq] [-p passno] [-n] [-f]
    disk-device-file mount-point
```

```
fsirand
    fsirand[-p][-Tfs-type] special
fsplit
    fsplit [-e] [-f] [-s] file...
fsstat
    fsstat [-Tfs-type] fs-device-file
fstyp
    fstyp file
ftp
    ftp[-d][-g][-i][-n][-v][remote-system]
ftpd
    ftpd [-d] [-1] [-ttimeout]
fuser
    fuser [-] [-k] [-nnamelist] [-u] file...
fwtmp
    fwtmp [-ic]
    wtmpfix [file]...
get
    get [-aseq-no][-b][-ccutoff][-e][-g][-ilist][-k][-l[p]][-m][-n]
    [-p][-rSID][-s][-t][-wstring][-xlist] file...
getopt
    getopt [flag-letter[:]]... [input-string]
getty
getty [-C string] [-d] [-h] [-i] [-q] [-t timeout] line
    [gettydefs-label [type [linedisc]]]
    getty -c file
apm_getty[-h][-t timeout] line [gettydefs-label [type [linedisc]]]
grap
    grap [-Ttty-type] [-1] [-] [file]...
```

graph

```
graph[-a[sp][st]][-b][-clabel][-g[style]][-h hspace][-1 title]
    [-m[mode]] [-r] [-s] [-t] [-u] [-u] [-w] [-w] [-w] [-w] [-w]
    [b][c]][-y[1][a][b][c]]
greek
    greek [-Tterminal]
areek
    greek -Tterminal[</usr/pub/greek]</pre>
grep
    grep[-b][-c][-i][-l][-n][-s][-v] expression [file]...
    egrep [-b] [-c] [-e expression] [-f file] [-i] [-1] [-n] [-v]
    [expression] [file]...
    fgrep[-b][-c][-e expression][-f file][-i][-1][-n][-v][-x]
    [strings] [file]...
groups
    groups [user]
grpck
    See pwck.
hangman
    hangman [dictionary]
hashcheck
    See spell.
hashmake
    See spell.
head
    head [-count] [file]...
help
    help [args]...
hex
    hex [-f] [-1] [-n#] [-ns8] [-r] [-s0] [-s2] [+saddr] ifile
```

```
hostid
    hostid [identifier]
hostname
    hostname [nameofhost]
hyphen
    hyphen [file]...
icmp
    None; included automatically with inet(5F).
id
    id
ident
    ident file...
ifconfig
    ifconfig interface [address[dest-address]] [option]...
    ifconfig interface [address-family]
in.fingerd
    See fingerd.
in.ftpd
    See ftpd.
in.tftpd
    See tftpd.
indent
    indent input [output][-bc, -nbc][-br, -bl][-cn][-cdn]
    [[-dj], -ndj][-dn][-in][-ln][-v, -nv]
indxbib
    indxbib [database]... [file]...
inet
    #include <sys/types.h>
    #include <netinet/in.h>
```

inetd

```
inetd [-d]
init
    init [run-level [directive]]
install
     install [-c dira] [-f dirb] [-g group] [-i] [-m mode] [-n dirc]
    [-0] [-s] [-u user] file [dirx]...
    install [-c dira] [-s] file [dirx]...
    install [-f dirb] [-o] [-s] file [dirx]...
    install [\neg g \ group][\neg i][\neg m \ mode][\neg n \ dirc][\neg o][\neg s][\neg u \ user]
    file [dirx]...
ip
     #include <sys/socket.h>
     #include <netinet/in.h>
ipcrm
    ipcrm [-m shmid] [-M shmkey] [-q msqid] [-Q msqkey] [-s semid]
    [-S semkey]
ipcs
    ipcs [-a] [-b] [-c] [-C corefile] [-m] [-N namelist] [-o] [-p] [-q]
    [-s][-t]
isotomac
    See mactoiso.
iw2
    iw2 [-a \ dotspace] [-b] [-c \ color] [-d] [-D \ udcfile] [-f] [-h]
    [-k mode] [-1 language] [-m margin] [-n length] [-0 file]
    [-p pitch] [-q quality] [-s spacing] [-t tabs] [-u] [-U udcfile]
    [-w \ value][-x][-z][file]...
join
    join[-an][-e string][-jn m][-o list][-tc] file 1 file 2
kconfig
    kconfig[-a[-v][-V]][-nnamelist]
```

kermit lav

kermit

```
kermit [-a fnI] [-b n] [-c] [-d] [-f] [-g rfn] [-h] [-i] [-k] [-1 dev [-n]] [-p x] [-q] [-r] [-s fn] [-t] [-w] [-x] [file]...
```

keyset

keyset [-c country] [-k keyboard]

kill

kill [-sig] pid...

killall

killall [-n namelist] [signal]

ksh

```
ksh[-a][-c string][-e][-f][-h][-i][-k][-m][-n][-o option]...
[-p][--positional-arg]... [±positional-arg]... [-r][-s][-t][-u][-v]
[-x][file]...
```

labelit

See volcopy.

last

last [name]... [tty]...

lastlogin

See acctsh.

launch

```
launch [-adr] application [document]...
launch -p [adr] application document...
```

launch

```
launch -a [-d] [-e] [-f] [-k value] [-m]
[-p swapdev-spec] [-r] [-v] [-S] [-s] [path]
```

```
launch -n [-d] [-e] [-f] [-k value] [-m] [-p swapdev-spec] [-r] [-v] [-s] [-S] [path]
```

lav

lav

```
1d
    ld[-afactor][-e epsym][-f fill][-ild][-lx][-m][-o outfile][-r]
    [-s][-t][-u \quad symname][-x][-z][-F][-Ldir][-M][-N][-S][-V]
    [-VS num] file...
leave
    leave [hhmm]
lex
    lex [-c] [-n] [-t] [-v] [file]...
life
    life [-r]
line
    line input
line_sane
    line_sane [fildes]
lint
    lint [-a] [-b] [-Dname[=def]] [-h] [-Idir] [-lx] [-n] [-o lib] [-p]
    [-u][-Uname][-v][-x] file...
1n
    ln[-s]file1 [file2]
    1n file... directory
    ln -f directory1 directory2
10
    pseudo-device loop
lockd
    See rpc.lockd.
login
    login[name [env-var...]]
Login
    Login [startmac-options] [--[-g][-r]]
logname
    logname
```

lookbib lpshut

```
lookbib
    lookbib [-n] database
lorder
    lorder file...
1p
    lp [-c] [-ddest] [-m] [-nnumber] [-ooption] [-s] [-ttitle] [-w] [file]...
lpadmin
    lpadmin -pprinter[-cclass][-eprinter][-h][-iinterface][-1]
    [-mmodel][-rclass][-vdevice]
    lpadmin -xdest
    lpadmin -d [dest]
1pc
    lpc [command [argument]...]
1pd
    lpd[-1][alt-internet-no]
1pmove
    See lpsched.
lpq
    lpg [+[sleep-interval]] [-1] [-Pprinter] [jobno]... [user]...
1pr
    lpr [-# copies] [-C class] [-h] [-i [indent-cols]] [-J cover-title] [-1]
    [-m] [-p] [-P printer] [-r] [-s] [-T title] [-wpage-width] [file]...
1prm
    lprm[-Pprinter][-][jobno]... [user]...
lpsched
    lpsched
    lpshut
    1pmove requests dest
    1pmove dest1 dest2
lpshut
    See lpsched.
```

lpstat

lptest

lptest [length [count]]

1s

m4

$$m4 [-Bint] [-e] [-Hint] [-s] [-Sint] [-Tint] [-Dname [=val]] [-Uname] [file]...$$

m68k

See machid.

machid

m68k

pdp11

u3b

u3b2

u3b5

u3b15

vax

macquery

```
macquery [-a] [-c] [-n] [-s] [-ttimeout] resource-file alert-id
[parm1 ... parm4]
```

macref

macsysinitrc

See brc.

mactoiso

```
mactoiso [-c char] [file] isotomac [-c char] [file]
```

mail

```
mailq
    mailq[-v]
mailx
    mailx[-d][-e][-f][filename][-F][-h][-h][-h][-i][-n]
    [-N] [-r address] [-s subject] [-u user] [-U] [name]...
make
    make [-a] [-b] [-B] [-d digits [-e] [-f description-file] [-g] [-G] [-i]
    [-k][-K][-M][-n][-p][-p][-q][-r][-s][-t][-u][-V][target]...
makedbm
    makedbm [-d yp-domain-name] [-i yp-input-file]
    [-m yp-master-name] [-o yp-output-name] infile outfile
    makedbm[-u dbmfilename]
makedev
    makedev files
makekey
    makekey
man
    man [-c] [-d] [-Tterm] [-w] [[section] name]...
man
    nroff -man files
    troff -man [-rs1] files
mastermind
    mastermind
math
    #include <math.h>
maze
    maze
me
    nroff -me [nroff-options]...
    troff -me [troff-options]...
```

merge

```
merge [-p] file1 file2 file3
mesg
    mesq [choice]
mkdir
    mkdir dirname...
mkfs
    mkfs device-file blocks[:inodes] [gap modulus]
    mkfs device-file proto-file [gap modulus]
mkfs1b
    mkfs1b special blocks[:inodes] [m n]
    mkfs1b special proto [m \ n]
mklost+found
    mklost+found
mknod
    mknod name type [major minor]
    mknod name p
mkshlib
    mkshlib -s specs [-n] -t target [-h host]
mkslipuser
    mkslipuser
mkstr
    mkstr [-] messagefile prefix file...
mm
    mm[-12][-c][-e][-E][-t][-Ttty-type][file]...
mm
    mm [options] [files]
    nroff -mm [options] [files]
    nroff -cm [options] [files]
    mmt [options] [files]
    troff -mm [options] [files]
```

mmt mt

```
mmt.
    mmt [-a] [-Ddest] [-e] [-g] [-p] [-t] [-Ttty-type] [-z] [file]...
    mvt[-a][-Ddest][-e][-g][-p][-t][-Ttty-type][-z][file]...
module dump
    module_dump kernel-file
monacct
    See acctsh.
moo
    moo
more
    more [-c] [-d] [-f] [-1] [-n] [-s] [-u] [+linenumber] [file]...
    more [-c] [-d] [-f] [-l] [-n] [-s] [-u] [+/pattern] [file]...
    page [-c] [-d] [-f] [-l] [-n] [-s] [-u] [+linenumber] [file]...
    page [-c][-d][-f][-1][-n][-s][-u][+/pattern][file]...
mount
    mount [-p]
    mount -a[f][r][v][-t type][-T type]
    mount [-f][r][v][-t] type [-T][v][-t] type [-T][v][-t] type [-T][v][-t]
    mount-point
    umount [-v] -h host
    umount -a [v]
    umount [-v] [device-file]...
    umount [-v] [mount-point]...
mountd
    rpc.mountd [-n]
mptx
    nroff -mptx [options] [files]
    troff -mptx [options] [files]
ms
    nroff -ms [nroff-options]...
    troff -ms [troff-options]...
mt
    mt [-fdevice-file] command [count]
```

```
mv
    mv [-i] [-f] [-] file1 file2
    mv[-i][-f][-] file... directory
mv
    myt [-a] [options] [files]
    troff [-a] [-rX1] -mv [options] [files]
mvt
    See mmt.
named
    named [-d debuglevel] [-p port#] [bootfile]
ncheck
    ncheck [-a] [-i i-node-numbers] [-s] [-Tfile-system-type]
    [file-system]
ncstats
    ncstats
ndx
    ndx subjfile formatter-command-line
neqn
    neqn [-dxy][-fn][-pn][-sn][-][file]...
netstat
    netstat [-a] [-A] [-n] [-f address-family] [kernel]
    [memory-interface]
    netstat [-h] [-i] [-m] [-n] [-r] [-s] [-f address-family] [kernel]
    [memory-interface]
    netstat [-I interface] interval [kernel] [memory-interface]
    netstat -I interface [-n] [kernel] [memory-interface]
newaliases
    newaliases
newconfig
    newconfig[-k][module]... [nomodule]... [nonet][-v]
```

newform nroff

```
newform
```

```
newform [-an] [-bn] [-cchar] [-en] [-f] [-itabspec] [-ln] [-otabspec] [-pn] [-s] [file]...
```

newfs

```
newfs [-b block-size] [-c cylinders-per-group] [-f fragment-size] [-i bytes-per-inode] [-m free-space] [-r revolutions-per-minute] [-s size] [-t tracks-per-cylinder] [-v] device-file type
```

newgrp

```
newgrp [-] [group]
```

news

newunix

newunix [[no]module]...

nfsd

```
nfsd [nserver]... biod [nserver]...
```

nfsstat

nice

nice[-increment] command [arguments]

nl

```
nl [-btype] [-ddelim] [-ftype] [-htype] [-iincr] [-lnum] [-nformat] [-p] [-ssep] [-vstart#] [-wwidth] file
```

nm

$$nm[-d][-e][-f][-h][-n][-o][-T][-u][-v][-v][-x]$$
 file...

nohup

```
nohup command-line &
```

nroff

```
nroff[-e][-h][-i][-mname][-nstart-no][-opage-range][-q]
[-rletter[value]][-s[pages-per-pause]][-Ttty-type][-u[boldening-amt]]
[-z][file]...
```

nslookup

```
nslookup
    nslookup -server
    nslookup host-to-find [server]
nterm
nulladm
    See acctsh.
number
    number
od
    od [-b] [-c] [-d] [-o] [-s] [-x] [file] [[+] offset [.] [b]]
otroff
    otroff[-cname][-b][-f][-kname][-mname][-ppoint-size][-t]
    [-w] [file]...
pac
    pac [-c] [-m] [-pprice] [-Pprinter] [-r] [-s] [name]...
pack
    pack [-] [-f] file...
    pcat file...
    unpack file...
page
    See more.
pagesize
    pagesize
passwd
    passwd [name]
paste
    paste file1 file2 ...
    paste -dlist file1 file2 ...
    paste -s [-dlist] file1 file2 ...
```

```
pax
    pax [-cimopuvy] [-f archive] [-s replstr] [-t device] [pattern]...
    pax -r[-cimnopuvy][-f archive][-s replstr][-t device]
    [pattern]...
    pax -w[-adimuvy][-b blocking][-f archive][-s replstr]
    [-t device] [-x format] [path]...
    pax -rw[-ilmopuvy][-s replstr][path]... directory
pcat
    See pack.
pdp11
    See machid.
pg
    pg[-number][+linenumber][+/pattern][-c][-e][-f][-n]
    [-p string] [-s] [file]...
pic
    pic [-Ttty-type] [-] [file]...
ping
    ping [-d] [-r] [-v] host [packet-size] [npackets]
    pname [-a] [-c controller] [-d disk] [-s slice] [-t type] name
    pname[-p]
    pname -a [v]
    pname -u device-file...
portmap
    portmap
powerdown
    powerdown
powerfail
    See brc.
pr
    pr[+pageno][-columns][-a][-d][-eck][-f][-h head][-ick][-lk]
    [-m][-nck][-ok][-p][-r][-sc][-t][-wk][file]...
```

```
prctmp
    See acctsh.
prdaily
    See acctsh.
printenv
    printenv [argument]
prof
    prof [-a] [-c] [-g] [-h] [-m mdata] [-n] [-o] [-s] [-t] [-x] [-z]
    [objfile]
prof
    #define MARK
    #include <prof.h>
    void MARK (name)
prs
    prs [-a] [-c[date-time]] [-d[dataspec]] [-e] [-1] [-r[SID]] file...
prtacct
    See acctsh.
ps
    ps[-a][-ccorefile][-d][-e][-f][-ggrplist][-1][-nnamelist]
    [-pproclist] [-sswapdev] [-ttermlist] [-uuidlist]
psbanner
    See transcript.
pscomm
    See transcript.
psdit '
    psdit [-F fontdir] [-o list] [-p prologue] [file]
psinterface
    See transcript.
```

```
psroff
    psroff[-t][[-a][-i][-mname][-nN][-olist][-q][-raN][-sN]
    [-Tdest] [-ddest] [-C class] [-J name] [-h] [-nx] [-P printer] [-r]
    [-s][-m][-w]][file]...
psrv
    See transcript.
pstat
    pstat [-a] [-b] [-f] [-i] [-m] [-nnamelist] [-p] [-rrate] [-t]
    [-uaddress] [-v] [file]
pstext
    See transcript.
ptx
    ptx[-b break][-f][-g gap][-i ignore][-r][-t][-w n]
    [input [output]]
    ptx[-b break][-f][-g gap][-o only][-r][-t][-w n]
    [input [output]]
pwck
    pwck [file]
    grpck [file]
pwd
    pwd
query
    query [-t[seconds]] [-r[response]] [-m]
quiz
    quiz [-ifile] [-t] [category1 category2]
rain
    rain
rc
    See brc.
rcp
    rcp file1 file2
    rcp [-r] file... directory
```

rcs

```
 \begin{array}{lll} & rcs \ [-alogins]] \ [-Aoldfile] \ [-cstring] \ [-e[logins]] \ [-i] \ [-1[rev]] \ [-L] \\ & [-nname[:rev]] \ [-Nname[:rev]] \ [-orange] \ [-q] \ [-sstate[:rev]] \\ & [-t[txtfile]] \ [-u[rev]] \ [-U] \ files \\ \end{array}
```

rcsdiff

```
rcsdiff[-b][-c][-e][-f][-h][-i][-n][-t][-w][-rrev1]
[-rrev2]file ...
```

rcsintro

rcsmerge

```
rcsmerge -rrev1 [-rrev2] [-p] file
```

rcvhex

```
rcvhex [-p port] [-c command] file
```

rdist

```
rdist [-b] [-dvar=value] [-fdistfile] [-h] [-i] [-mhost] [-n] [-q] [-R] [-v] [-w] [-y] [name]...
rdist [-b] -c name... [-h] [-i] [-n] [-q] [-R] [-v] [-w] [-y] [login@] host [:dest]
```

rdump

See dump.bsd.

read_disk

read disk

reboot

red

See ed.

refer

```
refer [-a[n]] [-b] [-B[l.m]] [-c] [-e] [-fn] [-kx] [-l[m,n]] [-n] [-p] [-bib] [-P] [-s] [file]...
```

regcmp

regcmp [-] file...

```
regexp
    #define INIT declarations
    #define GETC() getc-code
   #define PEEKC() peekc-code
    #define UNGETC (c) ungetc-code
    #define RETURN (pointer) return-code
   #define ERROR (val) errors-code
   #include <regexp.h>
   char *compile(instring, expbuf, endbuf, eof)
   char *instring, *expbuf, *endbuf;
   int eof;
   int step(string, exbuf)
   char *string, *exbuf;
   extern char *loc1, *loc2, *locs;
   extern int circf, sed, nbra;
reject
   reject [-r [reason]] [destination]...
remlogin
   remlogin -h host-name terminal-type
   remlogin -h host-name -p
   remlogin - r host-name
```

remsh

remsh rhost [-1 username] [-n] [command]

remshd

in.remshd host.port

reset

See tset.

restore rlog

```
restore
    restore i [b] [f] [F] [h] [m] [s] [v] [y] [bfFs-arg]...
restore r [b] [f] [F] [h] [m] [s] [v] [y] [bfFs-arg]...
restore R [b] [f] [F] [h] [m] [s] [v] [y] [bfFs-arg]...
restore t [b] [f] [F] [h] [m] [s] [v] [y] [bfFs-arg]... [archived-file]...
restore x [b] [f] [F] [h] [m] [s] [v] [y] [bfFs-arg]... [archived-file]...
rrestore i [b] [f] [F] [h] [m] [o] [s] [-Ttype] [v] [y] [bfFs-arg]...
rrestore r [b] [f] [F] [h] [m] [o] [s] [-Ttvpe] [v] [v] [bfFs-arg]...
rrestore R [b] [f] [F] [h] [m] [o] [s] [-Ttype] [v] [y] [bfFs-arg]...
rrestore t [b] [f] [F] [h] [m] [o] [s] [-Ttype] [v] [v] [bfFs-arg]...
    [archived-file]...
rrestore x [b] [f] [F] [h] [m] [o] [s] [-Ttype] [v] [y] [bfFs-arg]...
    [archived-file]...
rev
    rev [file]...
revnetgroup
    revnetgroup [-h] [-u]
rexecd
    in.rexecd host.port
rez
    rez [-a] [-align word-type] [-c reator] [-d macro-assignment]...
    [-i include-dir]... [-o output-file] [-ov] [-p] [-rd] [-ro]
    [-s res-include-dir]... [-t type] [-u macro]
    [resource-description-file]...
rlog
    rlog[-ddates][-h][-l[lockers]][-L][-revisions][-R][-sstates]
```

[-t] [-w[logins]] file...

```
rlogin
    rlogin rhost[-8][-ec][-1 username]
rlogind
    in.rlogind host.port
rm
    rm[-f][-i][-r] file...
    rmdir dir...
rmail
    rmail [-Ddomain-name] [-T] login-name ...
rmdel
    rmdel -r SID [file]...
rmdir
    See rm.
robots
    robots
roffbib
    roffbib[-e][-h][-m name][-nstart-no][-opage-range]
    -rletter[integer] [-sN] [-Ttty-type] [-x] [file]...
route
    route[-f][-n] command [net | host] destination gateway [metric]
routed
    in.routed[-d][-g][-q][-s][-t][logfile]
rpc.lockd
    rpc.lockd[-g grace-period][-t timeout]
rpc.statd
    rpc.statd
rpc.yppasswdd
    See yppasswdd.
```

rpcgen rwall

```
rpcgen
    rpcgen input-file
    rpcgen -c [-o output-file] [input-file]
    rpcgen -h [-o output-file] [input-file]
    rpcgen -1 [-o output-file] [input-file]
    rpcgen -m [-o output-file] [input-file]
    rpcgen -s transport[-o output-file] [input-file]
rpcinfo
    rpcinfo -p [host]
    rpcinfo -u host program-number version-number
    rpcinfo -t host program-number version-number
rrestore
    See restore.
rsh
    See sh.
rstatd
    rpc.rstatd
runacct
    runacct [mmdd [state]]
rup
    rup [-h] [-1] [-t] [host]...
ruptime
    ruptime [-a] [-1] [-t] [-u]
rusers
    rusers [-a] [-h] [-i] [-l] [-u] [host]...
rusersd
    rpc.rusersd
rwall
    rwall hosts
    rwall -n netgroup...
    rwall -h host -n netgroup
```

rwalld sccstorcs

```
rwalld
    rpc.rwalld
rwho
    rwho [-a]
rwhod
    in.rwhod
sa1
    See sadc.
sa2
    See sadc.
sact
    sact [-] file...
sadc
    sadc[t n][file]
    sal[t n]
    sa2[-a][-A][-b][-c][-etime][-isec][-m][-q][-stime][-u][-v]
    [-w][-y]
sag
    sag[-e time][-f file][-i sec][-s time][-T term][-x spec]
    [-y spec]
sar
    sar[-a][-A][-b][-c][-m][-q][-u][-v][-w][-y][-ofile]t[n]
    sar [-a] [-A] [-b] [-c] [-etime] [-ffile] [-isec] [-m] [-q] [-stime]
    [-u][-v][-w][-y]
SCCS
    sccs command [flags] [args] [-dpath] [-ppath] [-r]
sccsdiff
    sccsdiff -rdeltal -rdelta2 [-p] [-sn] file...
sccstorcs
    sccstorcs [-t] [-v] sccsfile ...
```

script shutacct

```
script
    script [-a][file]
sdb
    sdb [-w] [-W] [objfile [corfile [directory]]]
sdiff
    sdiff[-1][-0 output][-s][-w cols]file1 file2
sed
    sed [-n] -e command-line-script [file]...
    sed [-n] -f scriptfile [file]...
sendmail
    sendmail -bd -bi -bm -bp -bs -bt -bv -bz -Cconfiguration-file
    -ddebug-level -Ffull-name -fname -hhop-count -n
    -oconfiguration-option value -q[interval] -rname -t -v [address]...
setfile
    setfile [-aattribute-string] [-ccreator]
    [-1horizontal-pixels, vertical-pixels] [-ttype] [data-file]...
setport
    setport -o [-s baud-rate] tty...
    setport -r [-s baud-rate] tty...
settimezone
    settimezone
sh
    sh [-c string] [-i] [-r] [-s] [-a] [-e] [-f] [-h] [-k] [-n] [-t] [-u]
    [-v][-x][args]...
    rsh[-c string][-i][-r][-s][-a][-e][-f][-h][-k][-n][-t][-u]
    [-v][-x][args]...
shl
    shl
showmount
    showmount [-a][-d][-e][host]
shutacct
    See acctsh.
```

shutdown spellin

```
shutdown [-ginterval][-h][-iinitstate][-k][-n][-r][-y]
    [timeout [warning-message]]
size
    size[-d][-o][-V][-x]file...
slattach
    slattach[+c][-c][+e][-e][+i][-i] tty local-name remote-name
    [baud-rate]
slattconf
    slattconf [+c] [-c] [+e] [-e] [+i] [-i] tty baud-rate client-address
    cslip-server-address [ifconfig-argument]...
sleep
    sleep time
slip
    slip
sno
    sno [file]...
soelim
    soelim [file]...
sort
    sort [-b] [-c] [-d] [-f] [-i] [-m] [-M] [-n] [-o output] [-r] [-tx]
    [-u] [-y [kmem]] [-zrecsz] [+pos1 [-pos2]] [file...]
sortbib
    sortbib [-skeys] database...
spell
    spell[-v][-b][-x][-l][+local-file][file]...
    hashmake
    spellin n
    hashcheck spelling-list
spellin
    See spell.
```

shutdown

```
spline
    spline[-a][-k][-n][-p][-xlower[upper]]
split
    split [-] [-n] [file [output-file]...]
spray
    spray host[-c count][-1 length]
sprayd
    rpc.sprayd
ssp
    ssp [-] [name]...
startmac
    startmac[-f findername][-m memsize][-o name[=value]]
    [-P patchfile] [-s sysfolder] [-S systemfile]
    startmac24[-f findername][-m memsize][-o name[=value]]
    [-P patchfile] [-s sysfolder] [-S systemfile] [-u user] startup-app
startmac24
    See startmac.
StartMonitor
    StartMonitor
startmsg
    startmsg -
    startmsg[-d pcntdone][-m msgselector[-n nextphase]
    [\neg p \ numphases] [\neg q] [substr1...substr4]]
startup
    startup
startup
    See acctsh.
StartupShell
stat
    #include <sys/types.h>
    #include <sys/stat.h>
```

statd sysinitrc

```
statd
    See rpc.statd.
stdhosts
    stdhosts file
strings
    strings[-][-o][-number] file...
strip
    strip[-1][-r][-s][-V][-x] file...
stty
    stty [-a] [-g] [-n file] [options]
style
    style[-a][-e][-l num][-ml][-mm][-p][-P][-r num]file...
su
    su [-] [name[arg ...]]
subj
    subj file...
sum
    sum [-r] file...
sumdir
    sumdir [directories]
swap
    swap -a [swapdev [swaplow [swaplen]]]
    swap -d swapdev [swaplow]
    swap -1
sync
    sync
sysinitro
    See brc.
```

sysline tcb

```
sysline
    sysline [+seconds] [-b] [-c] [-d] [-D] [-e] [-h] [-H remote] [-i]
    [-j][-1][-m][-p][-q][-r][-s]
syslogd
    syslogd [-d] [-fconfigfile] [-mmarkinterval]
systemfolder
    systemfolder [-f] [-u user]
    systemfolder24[-f][-u user]
systemfolder24
    See systemfolder.
tabs
    tabs [tabspec] [+m[n]] [-Ttype]
tail
    tail [±[number][[b][f]]] [file]
    tail [±[number][[c][f]]] [file]
    tail [±[number][[1][f]]] [file]
talk
    talk user [ttyname]
talkd
    in.talkd
tar
    tar [-]c[0...7[density]][ilvbBdfs][bBdfs-arg]... file...
    tar [-]r[0...7[density]][ilvbBdfs][bBdfs-arg]... file...
    tar [-]t[0...7][ivw][f archive] [file-in-archive]...
    tar[-]u[0...7[density]][ilvbBdfs][bBdfs-arg]... file...
    tar [-]x[0...7][timovw[f archive] [file-in-archive]...
tbl
    tbl [-TX] [file]...
tc
    tc [-a n] [-e] [-o list] [-t] [file]...
tcb
    command-line | tcb >/dev/rmt/tcx
```

tcp timex

```
tcp
    #include <sys/socket.h>
    #include <netinet/in.h>
    s = socket(AF_INET, SOCK_STREAM, 0);
tee
    tee [-i] [-a] [file]...
telinit
    See init.
telnet
    telnet host [port]
    telnet
telnetd
    in.telnetd
term
test
    test [expr]
TextEditor
   TextEditor [file]...
tftp
   tftp [host]
tftpd
    in.tftpd[-d][-s][home-directory]
tic
   tic[-v[n]] file...
time
   time command
timex
   timex[-o][-p[fhkmrt]][-s] command
```

```
tip
    tip [-v] [-speed] system-name
    tip[-v][-speed] phone-number
touch
    touch [-a] [-c] [-m] [mmddhhmm[yy]] file...
tp
    tp d[[0...7][i][m][v][w]][file-in-archive]...
    tp r[[0...7] [c] [i] [m] [v] [w]] [file-in-archive]...
    tp t[[0...7][i][m][v][w]][file-in-archive]...
    tp u[[0...7] [c] [i] [m] [v] [w]] [file-in-archive]...
    tp x[[0...7][f][i][m][v][w]][file-in-archive]...
tplot
    tplot [-Tterminal [-e raster-file]]
tput
    tput [-Ttype] capname
tr
    tr [-c] [-d] [-s] [string1 [string2]]
transcript
    psbanner
    pscomm
    psinterface
    psrv
    pstext
trek
    trek [[-a] file]
troff
    troff[-][-a][-i][-mname][-nN][-olist][-q][-raN][-sN]
    [-Tdest] [file...]
troff
trpt
    trpt [-a] [-j] [-phex-address] [-s] [-t] [system[core]]
```

true tzdump

```
true
    true
    false
tset
    tset [-] [-a type] [-A] [-d type] [-ec] [-Ec] [-kc] [-1] [-m port]
    [-p \ type][-Q][-r][-S][-S]
    reset
tsort
    tsort [file]
ttt
    ttt
    cubic
tty
    tty [-1][-s]
tty add
    tty_add [-r] [-glabel] device-file-name...
    tty_kill
tty_kill
    See tty_add.
tunefs
    tunefs [-a maxcontig] [-d rotdelay] [-e maxbpg] [-m free-space]
    [-o optimization] [-p] disk-device-file
turnacct
    See acctsh.
twinkle
    twinkle[-][+][s file][density1 [density2]]
types
    #include <sys/types.h>
tzdump
    tzdump [-c cutoffyear] [-v] [zone]...
```

```
tzic
    tzic [-d directory] [-1 localtime-link] [-L leap-file]
    [-p posixrules-link] [-s] [-v] [source-file]...
u3b
    See machid.
u3b15
    See machid.
u3b2
    See machid.
u3b5
    See machid.
ucbdiff
    ucbdiff[-b][-c][-e][-f][-h][-i][-l][-n][-r][-s][-S file]
    [-t][-w] dir1 dir2
    ucbdiff[-b][-c][-e][-f][-h][-i][-n][-t][-w]file1 file2
    ucbdiff[-b][-Dstring][-i][-w]file1 file2
ucbdiff3
    ucbdiff3 [-e][-E][-x[-3]][-X[-3]] ver1 ver2 ver3
udp
    #include <sys/socket.h>
    #include <netinet/in.h>
    s=socket(AF_INET, SOCK_DGRAM, 0);
u1
    ul [-t terminal] [file]...
umount
    See mount.
uname
    uname [-a][-m][-n][-r][-s][-v]
uncompact
```

See compact.

uncompress uucleanup

```
uncompress
    See compress.
uncompressdir
    See compress.
unexpand
    See expand.
unget
    unget [-n] [-rSID] [-s] file...
uniq
    uniq[-c][-d][+num][-num][-u][infile [outfile]]
units
    units
unpack
    See pack.
updater
    updater [d] [r] [u] local remote...
    updater [p] [r] [u] local remote...
    updater[t][r][u] local remote...
uptime
    uptime
users
    users [file]
uucheck
    uucheck [-v] [-xdebug-level]
uucico
    uucico [-cdevice-type] [-dspool-directory] [-f] [-iinterface]
    [-rmode] [-ssystem] [-ulogin-name] [-xdebug-level]
uucleanup
    uucleanup [-Cdays] [-Ddays] [-mstring] [-odays] [-ssystem]
    [-Wdays][-Xdays][-Xdebug-level]
```

uucp uusched

```
uucp[-c][-d][-f][-ggrade][-j][-m][-nlogin-name][-r]
   [-sfile] [-xdebug-level] source-file destination-file
uucpd
    /etc/uucpd
uudecode
   See uuencode.
uudemon.admin
   uudemon.admin
uudemon.cleanup
   uudemon.cleanup
uudemon.hour
   uudemon.hour
uudemon.poll
   uudemon.poll
uuencode
   uuencode [source-file] decoded-name
   uudecode [encoded-file]
uuglist
   uuglist [-1][-u][-xdebug-level]
uulog
   uulog [-cqx] [-lines] [-fsystem] [system]...
   uulog [-cqx] [-l[hours]] [-lines] [-ssystem] [system]...
uuname
   uuname[-c][-1]
uupick
   See uuto.
uusched
   uusched [-udebug-level] [-xdebug-level]
```

uucp

uusend vedit

```
uusend
    uusend [-m file-permission] -r sourcefile system! ... remotefile
uustat
    uustat [-a] [-Sjob-status] [[-j] [-ssystem]] [-ulogin-name]
    [-xdebug-level]
    uustat -kjob-id [-n][-xdebug-level]
    uustat -m[-xdebug-level]
    uustat -p[-xdebug-level]
    uustat -q[-xdebug-level]
    uustat -rjob-id [-n][-xdebug-level]
    uustat -tsystem [-dminutes][-c][-xdebug-level]
uuto
    uuto [-m] [-p] file... destination
    uupick [-ssystem]
Uutry
    Uutry [-c-device-type] [-r] [-xdebug-level] system
uux
    uux [-][-aname][-b][-C][-c][-ggrade][-j][-n][-p][-r]
    [-sfile] [-xdebug-level] [-z] command-string
uuxqt
    uuxqt [-ssystem] [-xdebug-level]
val
    val-
    val [-mname][-rSID][-s][-ytype] file...
values
    #include <values.h>
vax
    See machid.
VC
    vc [-a] [-cchar] [-s] [-t] [keyword=value]...
vedit
    See vi.
```

version which

```
version
    version file...
vi
    vi[+command][-1][-r[file]][-R][-t tag][-wn][-x] name...
    view [+command][-1][-r][file][-R][-t][-t][-wn][-x][-wn]
    vedit[+command][-1][-r[file]][-R][-t tag][-wn][-x] name...
view
    See vi.
vipw
    vipw
volcopy
    volcopy [-a] [-bpidensity] [-buf] [-feetsize] [-reelnum] [-s]
   fsname special 1 volname 1 special 2 volname 2
    labelit special [fsname volume [-n]]
w
    w [-h] [-1] [-s] [-u] [user]
wall
    wall
WC
    wc [-[chunk-size]] [file]...
what
    what [-s] file...
whatis
    whatis command...
whereis
    whereis [-b] [-B dir [-f] [-m] [-M dir [-f] [-s] [-S dir [-f]
    [-u] file...
which
    which [name]...
```

who ypbind

```
who
    who [-a] [-b] [-d] [-H] [-1] [-p] [-s] [-t] [-T] [-u] [file]
    who -r [-d] [-1] [-p] [-u] [file]
    who -q [file]
    who am i
    who am I
whoami
    whoami
whodo
    whodo
worm
    worm [size]
worms
    worms [-field] [-length n] [-number n] [-trail]
write
    write user [line]
wtmpfix
    See fwtmp.
wump
    wump
xargs
    xargs [-eeofstr] [-ireplstr] [-lnumber] [-nnumber] [-p] [-ssize]
    [-t][-x][command [cmd-args]]
xstr
    xstr [-][-c][file]
yacc
    yacc [-d] [-1] [-t] [-v] grammar
yes
    yes [expletive]
ypbind
    See ypserv.
```

```
vpcat
    ypcat [-d domain-name] [-k] [-t] map-or-nick-name
    ypcat -x
ypinit
    ypinit -m
    ypinit -s server-name
ypmake
    cd /etc/yp; make [set-name] [variable=value...]
ypmatch
    ypmatch [-d domain] [-k] [-t] key ... nickname-or-map-name
    vpmatch-x
yppasswd
   yppasswd [login-name]
yppasswdd
    rpc.yppasswdd file [-m make-arg...]
yppol1
    yppoll [-h host] [-d domain] mapname
yppush
   yppush [-d domain-name] [-v] mapname
ypserv
   ypbind(-s)(-secure)(-v)(-ypset)(-ypsetme)
ypset
   ypset [-V1] [-d domain-name] [-h host-name] server
   ypset [-V2] [-d domain-name] [-h host-name] server
ypwhich
   ypwhich [-d domain-name] [-V1] [host-name]
   ypwhich [-d domain-name] [-V2] [host-name]
   ypwhich [-d domain-name] [[-t] -m [map-or-nickname]]
```

ypwhich -x

ypxfr

ypxfr[-c][-d domain-name][-f][-h host-name] map-name
ypxfr -d domain-name[-C tid prog ipadd port] map-name

zcat

See compress.

zcmp

See compress.

zdiff

See compress.

zmore

See compress.

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```
absolute value
    abs(3C) — return integer absolute value
    abs(3F) — Fortran absolute value
    floor(3M) — floor, ceiling, remainder, absolute value functions
access lists, groups
    getgroups(2) — gets group access list
    setgroups(2) — sets group access list
    initgroups(3) — initializes group access list
access, time of last
    utime(2) — set file access and modification times
accounting, connect-time
    acctcon(1M) — invoke connect-time accounting
    fwtmp(1M) — manipulate connect accounting records
accounting, of processes
    ipcs(1) — reports interprocess communication facilities status
    lav(1) — displays load average statistics
    sag(1G) — generates a system activity graph
    sar(1) — reports system activity
    sysline(1) — displays the system status on the status line of a terminal
    acct(1M) — present an overview of accounting commands
    acctcms(1M) — summarizes commands from per-process accounting
         records
    acctcom(1M) — searches and formats process accounting files
    acctcon(1M) — invoke connect-time accounting
    acctmerg(1M) — merges or adds accounting files
    acctprc(1M) — provide process accounting
    acctsh(1M) — provide shell procedures for accounting
    diskusg(1M) — generates disk accounting data by user ID
    fwtmp(1M) — manipulate connect accounting records
    pac(1M) — gathers printer/plotter accounting information
    runacct(1M) — runs daily accounting
    sadc(1M) — report system activity
    acct(2) — enable or disable process accounting
    times(2) — get process and child process times
    acct(4) — per-process accounting file format
    prof(5) — profile within a function
accounting, system
    ipcs(1) — reports interprocess communication facilities status
    lav(1) — displays load average statistics
    sag(1G) — generates a system activity graph
    sar(1) — reports system activity
```

```
sysline(1) — displays the system status on the status line of a terminal
    acct(1M) — present an overview of accounting commands
    acctcms(1M) — summarizes commands from per-process accounting
         records
    acctcom(1M) — searches and formats process accounting files
    acctcon(1M) — invoke connect-time accounting
    acctmerg(1M) — merges or adds accounting files
    acctprc(1M) — provide process accounting
    acctsh(1M) — provide shell procedures for accounting
    diskusg(1M) — generates disk accounting data by user ID
    fwtmp(1M) — manipulate connect accounting records
    pac(1M) — gathers printer/plotter accounting information
    runacct(1M) — runs daily accounting
    sadc(1M) — report system activity
address handling
    arp(1M) — displays and modifies the address translation table
    stdhosts(1M) — converts Internet addresses to standard form
    end(3C) — last locations in program
advisory lock
    flock(2) — applies or removes an advisory lock on an open file
alarm clock
    alarm(2) — sets a process's alarm clock
alert dialog boxes
    macquery(1M) — posts a Macintosh alert box to query the user
aliases, mail
    newaliases(1M) — rebuilds the database for the mail aliases file
    aliases(4) — address and alias format used by sendmail
    aliens(6) — plays the game of Space Invaders (A/UX version)
Apple ImageWriter
    iw2(1) — prepares data to be printed on the Apple ImageWriter II printer
Apple Tape Backup SC40
    tcb(1) — blocks data to 8K for direct input to /dev/rmt/tcx
    tc(7) — tape device driver
AppleTalk, administration
    appleping(1M) — exercises the AppleTalk network by sending packets
         to a named host
    appletalk(1M) — enables you to configure and display AppleTalk
         network interfaces
AppleTalk Datagrams
    ddp(3N) — provide an AppleTalk Datagram Delivery Protocol (DDP)
    udp(5P) — Internet User Datagram Protocol
```

```
AppleTalk, printing with
    at_cho_prn(1) — allows you to choose a default printer on the
         AppleTalk internet
    at lookup(1) — looks up network-visible entities (NVEs) registered on
         the AppleTalk network system
    atprint(1) — transfers data to a printer by using AppleTalk protocols
    atstatus(1) — displays status information from an AppleTalk device
AppleTalk Transaction Protocol
     atp(3N) — provide a AppleTalk Transaction Protocol (ATP) interface
arccosine
    acos(3F) — Fortran arccosine intrinsic function
    trig(3M) — provide trigonometric functions
archive files
    ar(1) — maintains a library of files in an archive
    cpio(1) — copies files to or from a cpio archive
    lorder(1) — finds the ordering relation for an object library
    pax(1) — copies files to or from an archive in an IEEE format
    tar(1) — copies files to or from a tar archive
    1dahread(3X) — reads the archive header of a member of an archive file
    ar(4) — common archive file format
    cpio(4) — format of cpio archive
    tar(4) — format of tar header
arcsine
    asin(3F) — Fortran arcsine intrinsic function
    trig(3M) — provide trigonometric functions
arctangent
    atan2(3F) — Fortran arctangent intrinsic function
    atan(3F) — Fortran arctangent intrinsic function
    trig(3M) — provide trigonometric functions
arguments
    apply(1) — passes its arguments in batches to a command that is run
         once per every batch
    echo(1) — echoes its arguments
    expr(1) — evaluates arguments as an expression
    xargs(1) — builds arguments based on the standard input, passing them
         in batches to the specified command which is executed enough times
         to deplete all the arguments
    getarg(3F) — return Fortran command-line argument
    getopt(3C) — get option letter from argument vector
    iargc(3F) — return command line arguments
    varargs(3X) — handle variable argument list
    vprintf(3S) — format and output data from a variable-length argument
         list
```

```
arithmetic
    bc(1) — processes an arbitrary-precision arithmetic language
    dc(1) — desk calculator
    expr(1) — evaluates arguments as an expression
    factor(1) — prints the prime factor of a given number
    units(1) — rescales quantities according to a the unit of measure
         specified
ASA character set
    asa(1) — interprets ASA carriage control characters
ASCII character set
    strings(1) — finds the printable strings in an object or other binary file
    a641(3C) — convert between long integer and base-64 ASCII string
    atof(3C) — converts an ASCII string to floating-point number
    ctime(3) — convert date and time to ASCII
    ethers(3N) — provide Ethernet address mapping operations
    ascii(5) — map of ASCII character set
assembly language
    as(1) — assembles files by translating assembler mnemonics to object
         code
    CC(1) — invokes the C compiler
    dbx(1) — debugs and executes programs
    dis(1) — produces an assembly language listing for a specified file
assertions
    assert(3X) — verify program assertion
ATP
    atp(3N) — provide a AppleTalk Transaction Protocol (ATP) interface
Autologic APS-5 phototypesetter
    daps(1) — invokes the Autologic APS-5 phototypesetter troff post-
         processor
autorecovery
    escher(1M) — helps you with autorecovery administration
    eu(1M) — updates autorecovery files
    eupdate(1M) — updates important files for autorecovery purposes
    cml(4) — configuration master list file format
backgammon
    back(6) — plays the game of backgammon
backing up files
    cp(1) — copies files
    cpio(1) — copies files to or from a cpio archive
    pax(1) — copies files to or from an archive in an IEEE format
    tar(1) — copies files to or from a tar archive
    bcopy(1M) — copies blocks interactively
    dcopy(1M) — copies System V File System-style file systems for optimal
         access time
```

```
dump, bsd(1M) — create a dump, bsd archive by making copies of files
         from a given file system
    escher(1M) — helps you with autorecovery administration
    eu(1M) — updates autorecovery files
    eupdate(1M) — updates important files for autorecovery purposes
    finc(1M) — generates a fast incremental backup for System V file
         systems
    frec(1M) — recovers files from a backup tape
    restore(1M) — retrieve files from within a dump, bsd archive into an
         existing file system
    volcopy(1M) — copy file systems with label checking
    dump.bsd(4) — format of a file-system dump
    tc(7) — tape device driver
bad blocks
    badblk(1M) — sets or updates bad block information
    altblk(4) — alternate block information for bad block handling
banner printing
    banner7(1) — generates a large banner
    banner(1) — generates a poster
base portion of pathnames
    basename(1) — get part of a pathname
base-64 numbers
    a 641(3C) — convert between long integer and base-64 ASCII string
batch processing
    at(1) — run commands at a later time
    crontab(1) — aids in the use of the cron process scheduling program
    env(1) — sets the environment for command execution
    nice(1) — executes a command at low priority
    nohup(1) — runs a command so that it can continue to run even after your
         session has ended
    remsh(1N) — invokes to a shell on a remote system
    sh1(1) — manages the layering of multiple shells
    yes(1) — generates y entries in response to requests for input
    chroot(1M) — changes the root directory for a command
    cron(1M) — runs the clock daemon
baud rate
    stty(1) — sets the modes for a terminal
    getty(1M) — set the initial communication modes, such as speed and
         line discipline, for the purpose of logging users in to A/UX through
    cfgetospeed(3P) — get or set the value of the output and input baud
         rate
```

```
Berkeley Software Distribution, support for
     siquec(2) — optional BSD-compatible software signal facilities
    curses 5.0(3X) — provides BSD-style screen functions with optimal
         cursor motion
    set 42 sig(3) — sets the Berkeley Software Distribution (BSD) 4.2 signal
         interface
Bessel functions
    bessel(3M) — Bessel functions
bibliographies
    addbib(1) — creates or extends a bibliographic database
    indxbib(1) — builds an inverted index for a bibliography
    lookbib(1) — finds references in a bibliography
    roffbib(1) — prints out all records in a bibliographic database
     sortbib(1) — sorts bibliographic database
big files
    bdiff(1) — compares the difference between two large files that are too
         big for diff to handle
    bfs(1) — edits big files
binary-coded decimal
    bcd(6) — simulates a punched card corresponding to a text argument
bindina
    ypserv(1M) — provide Network Information Service (NIS) service
    bind(2N) — bind a name to a socket
    HOSTNAME(4) — host name and domain name database
blackjack
    bj(6) — plays the game of black jack
blank lines in text
    ssp(1) — produces single spaced output
block zero information for file systems
    bzb(4) — Block Zero Block file format
blocking data
    dd(1) — converts and copies a file
    tcb(1) — blocks data to 8K for direct input to /dev/rmt/tcx
Boolean functions
    test(1) — evaluates conditions
    true(1) — provides truth values
    bool(3F) — Fortran bitwise boolean functions
Bourne shell
    sh(1) — runs the Bourne shell
bridges
    rtmp(3N) — identify AppleTalk node and bridge addresses
```

```
BSD, support for
    sigvec(2) — optional BSD-compatible software signal facilities
    curses 5.0(3X) — provides BSD-style screen functions with optimal
         cursor motion
    set 42 sig(3) — sets the Berkeley Software Distribution (BSD) 4.2 signal
         interface
buffering
    col(1) — filters text containing printer control sequences for use at a
         display device
    setbuf(3S) — assign buffering to a stream
byte order
    byteorder(3N) — convert values between host and network byte order
C programming language
    cb(1) — improves spacing and indentation of C source files
    cc(1) — invokes the C compiler
    cflow(1) — generates a C flowgraph
    cpp(1) — invokes the C language preprocessor
    ctags(1) — maintains a tags file for a C program
    ctrace(1) — debugs a C program
    cxref(1) — generates a C program cross-reference
    ident(1) — displays RCS keywords and their values
    indent(1) — indents and formats C program source
    lint(1) — invokes a C program checker
    mkshlib(1) — creates a shared library
    mkstr(1) — creates an error message file by massaging C source
         programs
    xstr(1) — reports strings from C programs to implement shared strings
calculate
    bc(1) — processes an arbitrary-precision arithmetic language
    dc(1) — desk calculator
    expr(1) — evaluates arguments as an expression
    factor(1) — prints the prime factor of a given number
    units(1) — rescales quantities according to a the unit of measure
         specified
calendar
    cal(1) — displays a calendar
    calendar(1) — provides a reminder service
ceiling numbers
    floor(3M) — floor, ceiling, remainder, absolute value functions
change bars
    diffmk(1) — marks the differences between two files
```

```
charcvt(3C) — converts the character code to another encoding scheme
character count
     sumdir(1) — sums and counts the characters within the files of the given
         directories
    wc(1) — counts characters, words, and lines in a file
character frequency
     freq(1) — reports character frequencies in a file
characters, general
     cut(1) — cuts out selected fields of each line of a file
     freq(1) — reports character frequencies in a file
    paste(1) — merges lines of several files or subsequent lines of one file
    rev(1) — reverses characters within each line of text
     tr(1) — translates characters
    wc(1) — counts characters, words, and lines in a file
    charcvt(3C) — converts the character code to another encoding scheme
    conv(3C) — translate characters
    ctype(3C) — classify characters
    getc(3S) — get character or word from a stream
    putc(3S) — put a character or word on a stream
    ungetc(3S) — pushes a character back into input stream
    egnchar(5) — special character definitions for egn and negn
    greek(5) — graphics for the extended TTY-37 type-box
checksums
     sum(1) — calculates a checksum
CML
     escher(1M) — helps you with autorecovery administration
    eupdate(1M) — updates important files for autorecovery purposes
    cm1(4) — configuration master list file format
code sections
     size(1) — displays section sizes of common object files
columns
    colrm(1) — removes columns from a file
    cut(1) — cuts out selected fields of each line of a file
    paste(1) — merges lines of several files or subsequent lines of one file
command interpretation, audit trail for
    script(1) — starts a shell that records terminal input and output
command interpretation, windows for
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
    vt102(7) — provides protocols for VT102 terminals
```

character codes

```
apply(1) — passes its arguments in batches to a command that is run
         once per every batch
    cmdo(1) — builds command lines interactively
    xargs(1) — builds arguments based on the standard input, passing them
         in batches to the specified command which is executed enough times
         to deplete all the arguments
command line interpreters
    csh(1) — runs the C shell, a command interpreter with C-like syntax
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
    remsh(1N) — invokes to a shell on a remote system
    sh(1) — runs the Bourne shell
    sh1(1) — manages the layering of multiple shells
    StartupShell(8) — interprets command lines such as those used to
         boot A/UX and check file systems within the A/UX Startup
         application
command options, help
    cmdo(1) — builds command lines interactively
command-line arguments
    apply(1) — passes its arguments in batches to a command that is run
         once per every batch
    echo(1) — echoes its arguments
    expr(1) — evaluates arguments as an expression
    xargs(1) — builds arguments based on the standard input, passing them
         in batches to the specified command which is executed enough times
         to deplete all the arguments
    getarg(3F) — return Fortran command-line argument
    getopt(3C) — get option letter from argument vector
    iargc(3F) — return command line arguments
    varargs(3X) — handle variable argument list
    vprintf(3S) — format and output data from a variable-length argument
         list
commands
    apropos(1) — locates commands by keyword
    env(1) — sets the environment for command execution
    uux(1C) — runs a command on a remote system
    what is(1) — reports a brief description for the manual page entry
         specified
    which(1) — reports the directory path to a file by interpreting PATH and
         alias settings
    system(3F) — issues a shell command from Fortran
    system(3S) — issues a shell command
```

command line generation

```
commands, device-specific
    clear(1) — clears the terminal screen
    eject(1) — ejects a diskette from the drive
    iw2(1) — prepares data to be printed on the Apple ImageWriter II printer
    mt(1) — manipulates magnetic tape media
    stty(1) — sets the modes for a terminal
    tabs(1) — sets the tab stops on a terminal
    tcb(1) — blocks data to 8K for direct input to /dev/rmt/tcx
    keyset(1M) — sets the keyboard for the console
communicating, host-to-host through TCP/IP
    ftp(1N) — transfers files by using the DARPA Internet File Transfer
         Protocol (FTP)
    rdist(1) — distributes remote files
    remsh(1N) — invokes to a shell on a remote system
    telnet(1C) — communicates with another host via the TELNET
         protocol
    tftp(1C) — transfers files via the Trivial File Transfer Protocol (TFTP)
    rwall(1M) — writes to all users over a network
    slip(1M) — assigns a serial line to a network interface
    tftpd(1M) — responds to requests to use the DARPA Trivial File
         Transfer Protocol
communicating, through serial ports
    ct(1C) — runs login on a dial-up line
    cu(1C) — establishes an interactive connection with another system
    kermit(1C) — invokes the Kermit file-transfer program
    tip(1C) — establishes a connection to a remote system
    updater(1) — updates files between two machines
    uuencode(1C) — encode and decode a binary file
communicating, through the UUCP system
    uucp(1C) — copies files from one system to another system
    uuglist(1C) — displays the service grades that are available on your
         system
    uusend(1C) — sends a file to a remote host
    uustat(1C) — controls uucp jobs and provides status information
    uuto(1C) — provide an easy interface to the uucp command, using the
         public directories
    uux(1C) — runs a command on a remote system
communicating, using AppleTalk
    at_cho_prn(1) — allows you to choose a default printer on the
         AppleTalk internet
    atlookup(1) — looks up network-visible entities (NVEs) registered on
         the AppleTalk network system
    atprint(1) — transfers data to a printer by using AppleTalk protocols
    atstatus(1) — displays status information from an AppleTalk device
```

```
communicating, utilities for
    biff(1) — enables and disables notification of mail by comsat
    from(1) — displays the mail header lines in your mailbox
    mail(1) — send mail to users or read mail
    mailx(1) — enables you to send and receive messages electronically
    mesq(1) — permits or denies the receipt of messages
    news(1) — displays local news items
    talk(1N) — talks to another user via the terminal
    write(1) — writes to another user
    wall(1M) — writes to all users
comparing files and directories
    bdiff(1) — compares the difference between two large files that are too
         big for diff to handle
    cmp(1) — compares two files
    comm(1) — selects or rejects lines common to two sorted files
    diff3(1) — compares three versions of a file
    diff(1) — compares two files or directories for any differences
    dircmp(1) — compares the contents of two directories
    merge(1) — merges three files into one
    rcsdiff(1) — compares RCS revisions
    sccsdiff(1) — compares two versions of an SCCS file
    sdiff(1) — reports side-by-side differences between two files in a side-
         by-side format
    sumdir(1) — sums and counts the characters within the files of the given
         directories
    ucbdiff3(1) — reports the differences between three files
    ucbdiff(1) — reports differences between two files or directories
    uniq(1) — reports repeated lines in a file
compatibility
    setcompat(2) — set or get process compatibility mode
    siquec(2) — optional BSD-compatible software signal facilities
    curses 5.0(3X) — provides BSD-style screen functions with optimal
         cursor motion
    set 42sig(3) — sets the Berkeley Software Distribution (BSD) 4.2 signal
         interface
    setposix(3P) — sets POSIX compatibility flags
compilers
    bs(1) — compiles and interprets bs programs
    cc(1) — invokes the C compiler
    £77(1) — invokes the Fortran 77 compiler
    regcmp(1) — compiles regular expressions with a file
    rez(1) — compiles Macintosh resource files from source code
    rpcgen(1) — generates C source code from a remote procedure call
         (RPC) source file
```

```
sno(1) — runs the SNOBOL interpreter
    yacc(1) — compiles compilers (yet another compiler-compiler)
    tic(1M) — compiles (translates) terminfo files
    tzic(1M) — compiles time-zone information files that are required to set
         the local time-zone
    regcmp(3X) — compile and execute a regular expression
    regexp(5) — regular expression compile and match routines
complex numbers
    aimag(3F) — Fortran imaginary part of complex argument
    conjg(3F) — Fortran complex conjugate intrinsic function
compressing and expanding files
    compact(1) — compress and uncompress files
    compress(1) — compress files and directories as well as expand them;
         support concatenation, browsing, and file-comparing operations upon
         compressed files
    crypt(1) — encodes and decodes passwords
    makekey(1) — generates an encryption key
    pack(1) — compress and expand files
concatenation
    cat(1) — catenates and displays the contents of files
    paste(1) — merges lines of several files or subsequent lines of one file
conditional execution
    test(1) — evaluates conditions
    true(1) — provides truth values
configuration
    checkinstall(1) — checks the installation of boards
    tset(1) — set or reset the terminal to a sensible state
    adduser(1M) — adds a user account
    autoconfig(1M) — creates an up-to-date kernel
    badblk(1M) — sets or updates bad block information
    channel (1M) — changes the current A/UX system node name
    diskformat(1M) — formats a disk through a driver-dependent format
         operation
    dp(1M) — performs disk partitioning
    getty(1M) — set the initial communication modes, such as speed and
         line discipline, for the purpose of logging users in to A/UX through
         serial lines
    init(1M) — spawn general processes
    kconfig(1M) — tunes kernel parameters for work-load optimization
    line_sane(1M) — pushes streams line disciplines
    lpadmin(1M) — configures the lp spooling system
    module_dump(1M) — queries kernel files for configuration information
    newconfig(1M) — generates an up-to-date kernel
    newunix(1M) — manipulates the files that determine the configuration of
```

```
a new kernel
    pname(1M) — associates named partitions with device files
    pstat(1M) — prints system facts
     setport(1M) — sets the characteristics of a serial port
     settimezone(1M) — sets the local time zone
     slattconf(1M) — attaches a serial line to a network interface and
         configures the network interface
     swap(1M) — adds disk blocks to or deletes them from the swap area
     tic(1M) — compiles (translates) terminfo files
     tty add(1M) — modify the /etc/inittab file in terms of enabling
         serial ports for use as login terminals
     tzdump(1M) — displays the date and time for one or more time zones
     tzic(1M) — compiles time-zone information files that are required to set
         the local time-zone
    uvar(2) — returns system-specific configuration information
     gettydefs(4) — speed and terminal settings used by getty
     inittab(4) — script for the init process
    master(4) — master kernel-configuration file format
Configuration Master List
    escher(1M) — helps you with autorecovery administration
     eupdate(1M) — updates important files for autorecovery purposes
     cm1(4) — configuration master list file format
connect-time accounting
    acctcon(1M) — invoke connect-time accounting
     fwtmp(1M) — manipulate connect accounting records
connections
    cu(1C) — establishes an interactive connection with another system
     telnet(1C) — communicates with another host via the TELNET
         protocol
     tip(1C) — establishes a connection to a remote system
    ping(1M) — exercises the TCP/IP network by sending Internet Control
         Message Protocol (ICMP) packets to a named host
     accept(2N) — accept a connection on a socket
     listen(2N) — listens for connections on a socket
    shutdown(2N) — shut down part of a full-duplex connection
    dial(3C) — establishes an out-going terminal line connection
     10(5) — software loopback network interface
console
    keyset(1M) — sets the keyboard for the console
     ioctl.syscon(4) — console terminal settings file
    console(7) — provides access to the console keyboard and screen
```

```
constant-width text
    cw(1) — prepare constant-width text for otroff
constants
    values(5) — machine-dependent values
converters
    conv(1) — swaps bytes in COFF files
    dd(1) — converts and copies a file
    enscript(1) — converts text files to format for printing
    fcnvt(1) — converts a file in one storage format to a different storage
         format
    hex(1) — converts an object file to Motorola S-record format
    mactoiso(1) — convert between Macintosh encoding and International
         Standards Organization (ISO) encoding
    units(1) — rescales quantities according to a the unit of measure
         specified
    a641(3C) — convert between long integer and base-64 ASCII string
copying
    atprint(1) — transfers data to a printer by using AppleTalk protocols
    cp(1) — copies files
    cpio(1) — copies files to or from a cpio archive
    csplit(1) — splits files into sections
    dd(1) — converts and copies a file
    fcnvt(1) — converts a file in one storage format to a different storage
         format
    1n(1) — makes links
    pax(1) — copies files to or from an archive in an IEEE format
    rcp(1C) — copies files between two systems
    split(1) — splits a file into a specified number of pieces
    tar(1) — copies files to or from a tar archive
    tp(1) — copies files to or from a tp archive
    uucp(1C) — copies files from one system to another system
    uuto(1C) — provide an easy interface to the uucp command, using the
         public directories
    bcopy(1M) — copies blocks interactively
    dcopy(1M) — copies System V File System-style file systems for optimal
         access time
    dump.bsd(1M) — create a dump.bsd archive by making copies of files
         from a given file system
    restore(1M) — retrieve files from within a dump, bsd archive into an
         existing file system
    volcopy(1M) — copy file systems with label checking
    blt(3C) — block transfer data
    cpio(4) — format of cpio archive
    tar(4) — format of tar header
```

```
core image
    fsync(2) — synchronize a file's in-core state with that on disk
    core(4) — format of core image file
cosine
    cos(3F) — Fortran cosine intrinsic function
    cosh(3F) — Fortran hyperbolic cosine intrinsic function
    trig(3M) — provide trigonometric functions
counters
    sumdir(1) — sums and counts the characters within the files of the given
         directories
    wc(1) — counts characters, words, and lines in a file
craps
    craps(6) — plays the game of craps
crashes
    errdead(1M) — extracts error records from a crash dump
    statd(1M) — provide crash and recovery monitoring for network locking
         services
creating new objects
    mkdir(1) — creates a directory
    mkshlib(1) — creates a shared library
    mkstr(1) — creates an error message file by massaging C source
         programs
    mkfs1b(1M) — constructs a file system with 512-byte blocks
    mkfs(1M) — constructs a System V file system
    mklost+found(1M) — makes a directory named lost+found to be
         used by fsck
    mknod(1M) — builds a device file
    mkslipuser(1M) — creates or updates the Compressed Serial
         Line/Internet Protocol (CSL/IP) database
    newconfig(1M) — generates an up-to-date kernel
    newfs(1M) — makes a Berkeley 4.2 (UFS) file system
    newunix(1M) — manipulates the files that determine the configuration of
         a new kernel
    ypmake(1M) — rebuilds the Network Information Service (NIS) maps
    creat(2) — creates a new file or rewrites an existing one
    fork(2) — creates a new process
    mkdir(2) — makes a directory file
    mknod(2) — makes a directory, or a special or ordinary file
    umask(2) — set and get file creation mask
    mkfifo(3P) — makes a FIFO special file
    mktemp(3C) — makes a unique filename
    tmpfile(3S) — creates a temporary file
    tmpnam(3S) — create a name for a temporary file
```

```
cribbage
    cribbage(6) — plays the game of cribbage
cross-references
    cxref(1) — generates a C program cross-reference
    lorder(1) — finds the ordering relation for an object library
    macref(1) — produces a cross-reference listing of macro files
current directory
    pwd(1) — prints the name of the working directory
    chdir(2) — changes the working directory
    getcwd(3C) — gets the pathname of the current working directory
    getwd(3) — gets the current working directory pathname
current host
    gethostid(2N) — get/set unique identifier of current host
    gethostname(2N) — get/set name of current host
current user
    whoami(1) — prints effective current user ID
daemons
    automount(1M) — mounts Network File System (NFS) when needed
    cron(1M) — runs the clock daemon
    errdemon(1M) — calls the error-logging daemon
    errstop(1M) — terminates the error-logging daemon
    inetd(1M) — starts Internet servers when needed
    init(1M) — spawn general processes
    lockd(1M) — handle local and remote lock requests
    1pd(1M) — supports the Berkeley print spooler." 4.2 line-printer daemon
    nfsd(1M) — invoke the NFS daemons
    routed(1M) — invokes the network routing daemon
    nfssvc(2) — provides NFS daemons
DARPA Internet
    ftp(1N) — transfers files by using the DARPA Internet File Transfer
         Protocol (FTP)
    nslookup(1) — interactively queries name servers
    rmail(1) — handles remote mail received via UUCP
    tftp(1C) — transfers files via the Trivial File Transfer Protocol (TFTP)
    ftpd(1M) — provide Internet File Transfer Protocol (FTP) service
    inetd(1M) — starts Internet servers when needed
    named(1M) — provides Internet domain name service
    portmap(1M) — converts RPC program numbers into DARPA protocol
         port numbers
    sendmail(1M) — sends mail
    stdhosts(1M) — converts Internet addresses to standard form
    telnetd(1M) — supports the DARPA standard TELNET protocol
    tftpd(1M) — responds to requests to use the DARPA Trivial File
        Transfer Protocol
```

```
inet(3N) — provide Internet address manipulation routines
    resolver(3N) — provide resolver routines
    networks(4N) — network name database
    protocols(4N) — protocol name database
    resolv.conf(4) — configuration file for resolver routines
    servers(4) — Internet server database
    services(4N) — service name database
    arp(5P) — Address Resolution Protocol
    icmp(5P) — Internet Control Message Protocol
    inet(5P) — Internet protocol family
    ip(5P) — Internet Protocol
    tcp(5P) — Internet Transmission Control Protocol
    udp(5P) — Internet User Datagram Protocol
DASI 300 terminal
    300(1) — filter text containing printer control sequences for a DASI
         terminal
DASI 450 terminal
    450(1) — filters text containing printer control sequences for the DASI
         terminal
data, blocking of
    dd(1) — converts and copies a file
    tcb(1) — blocks data to 8K for direct input to /dev/rmt/tcx
data, redirecting
    cat(1) — catenates and displays the contents of files
    csh(1) — runs the C shell, a command interpreter with C-like syntax
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
    sh(1) — runs the Bourne shell
    tee(1) — transcribes data
data streams
    line sane(1M) — pushes streams line disciplines
    fclose(3S) — close or flush a stream
    ferror(3S) — stream status inquiries
    fopen(3S) — open a stream
    fread(3S) — produce binary input/output
    fseek(3S) — reposition a file pointer in a stream
    getc(3S) — get character or word from a stream
    gets(3S) — get a string from a stream
    line_push(3) — routine used to push streams line disciplines
    print f(3S) — format and output string and numeric data
    putc(3S) — put a character or word on a stream
    puts(3S) — put a string on a stream
    rcmd(3N) — routines for returning a stream to a remote command
    rexec(3N) — returns a stream to a remote command
```

```
scanf(3S) — convert formatted input
    setbuf(3S) — assign buffering to a stream
    ungetc(3S) — pushes a character back into input stream
    streams(7) — provides an interface for character I/O
data types
    ftype(3F) — explicit Fortran type conversion
    xdr(3N) — provide library routines for external data representation
    types(5) — primitive system data types
Datagrams
    ddp(3N) — provide an AppleTalk Datagram Delivery Protocol (DDP)
         interface
    udp(5P) — Internet User Datagram Protocol
date and time
    cal(1) — displays a calendar
    calendar(1) — provides a reminder service
    date(1) — displays and sets the date
    leave(1) — reminds you when you have to leave
    cron(1M) — runs the clock daemon
    settimezone(1M) — sets the local time zone
    gettimeofday(2) — get/set date and time
    stime(2) — set time
    time(2) — get time
    ctime(3) — convert date and time to ASCII
    tzfile(4) — time-zone information
    nvram(7) — provides an interface to nonvolatile memory
debuggers
    adb(1) — debugs executable programs
    ctrace(1) — debugs a C program
    dbx(1) — debugs and executes programs
    sdb(1) — symbolic debugger
    fsdb(1M) — debugs the file system
    ping(1M) — exercises the TCP/IP network by sending Internet Control
         Message Protocol (ICMP) packets to a named host
    10(5) — software loopback network interface
decompiler
    derez(1) — decompiles a resource file
default values
    at_cho_prn(1) — allows you to choose a default printer on the
         AppleTalk internet
    chsh(1) — changes the default login shell
    umask(2) — set and get file creation mask
    finstallrc(4) — finstall default configuration file
    shells(4) — shell pathnames file
```

```
defaults, shell and session type
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
    chsh(1) — changes the default login shell
    Login(1M) — logs you in to A/UX by using a graphical user interface
    shells(4) — shell pathnames file
delayed execution
    at(1) — run commands at a later time
    crontab(1) — aids in the use of the cron process scheduling program
    sleep(1) — suspends the system for a specified interval of time
    cron(1M) — runs the clock daemon
    pause(2) — suspends a process until signal
deletina
    cancel(1) — cancels print requests spooled through the 1p command
    colrm(1) — removes columns from a file
    cut(1) — cuts out selected fields of each line of a file
    deroff(1) — removes nroff/troff, tbl, and egn constructs
    ipcrm(1) — removes interprocess communications facilities
    kill(1) — terminates a process
    1prm(1) — removes jobs from the line printer spooling queue for a
         Berkeley file system (4.2)
    rm(1) — remove files or directories
    rmdel(1) — removes a delta from an SCCS file
    dev kill(1M) — removes device files from a directory
    killall(1M) — kills all active processes
    flock(2) — applies or removes an advisory lock on an open file
    rmdir(2) — remove a directory file
    unlink(2) — remove directory entry
    unmount(2) — remove a file system
    insque(3N) — insert/remove element from a queue
delta files (SCCS)
    cdc(1) — changes the delta commentary of an SCCS delta
    comb(1) — combines SCCS deltas
    delta(1) — makes a delta (change) to an SCCS file
    rmdel(1) — removes a delta from an SCCS file
    sact(1) — displays who has checked a Source Code Control System
         (SCCS) file out for editing
description files, troff fonts
    makedev(1) — prepares troff description files
    afm(4) — Adobe POSTSCRIPT font metrics file format
    font(5) — description files for device-independent troff
```

```
descriptor tables
     getdtablesize(2N) — gets descriptor table size
descriptors, general
    close(2) — closes a file descriptor
    dup(2) — duplicates a descriptor
     dup2(3N) — duplicates a descriptor
desktop, Macintosh
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
device description files
    printcap(4) — printer-capability database
    termcap(4) — terminal capability database
     terminfo(4) — terminal capability database
device file management
    tty(1) — obtains the device filename for the terminal or CommandShell
         window where it is invoked
    dev_kill(1M) — removes device files from a directory
    devnm(1M) — displays the current device name
    mknod(1M) — builds a device file
    pname(1M) — associates named partitions with device files
    tty(7) — controls the terminal interface
device files, overview
    intro(7) — introduces device drivers and interfaces
device-specific commands
    clear(1) — clears the terminal screen
    eject(1) — ejects a diskette from the drive
    iw2(1) — prepares data to be printed on the Apple ImageWriter II printer
    mt(1) — manipulates magnetic tape media
    stty(1) — sets the modes for a terminal
    tabs(1) — sets the tab stops on a terminal
    tcb(1) — blocks data to 8K for direct input to /dev/rmt/tcx
    keyset(1M) — sets the keyboard for the console
Diablo 1620 printer
    450(1) — filters text containing printer control sequences for the DASI
         terminal
dialog boxes, constructing Macintosh alert
    macquery(1M) — posts a Macintosh alert box to query the user
dialog boxes, Macintosh
    cmdo(1) — builds command lines interactively
    Login(1M) — logs you in to A/UX by using a graphical user interface
    macquery(1M) — posts a Macintosh alert box to query the user
```

```
dialup communication
    cu(1C) — establishes an interactive connection with another system
    kermit(1C) — invokes the Kermit file-transfer program
    tip(1C) — establishes a connection to a remote system
    uucp(1C) — copies files from one system to another system
    uux(1C) — runs a command on a remote system
    slip(1M) — assigns a serial line to a network interface
    uucico(1M) — transfers files as specified by uucp work files
    dial(3C) — establishes an out-going terminal line connection
    dialup(4) — modem escape sequence file
    phones(4) — remote host telephone number database
differences
    bdiff(1) — compares the difference between two large files that are too
         big for diff to handle
    cmp(1) — compares two files
    diff3(1) — compares three versions of a file
    diff(1) — compares two files or directories for any differences
    diffmk(1) — marks the differences between two files
    dircmp(1) — compares the contents of two directories
    rcsdiff(1) — compares RCS revisions
    sccsdiff(1) — compares two versions of an SCCS file
    sdiff(1) — reports side-by-side differences between two files in a side-
         by-side format
    ucbdiff3(1) — reports the differences between three files
    ucbdiff(1) — reports differences between two files or directories
directories
    dircmp(1) — compares the contents of two directories
    ln(1) — makes links
    1s(1) — lists the contents of a directory
    mkdir(1) — creates a directory
    mv(1) — moves or renames files
    sumdir(1) — sums and counts the characters within the files of the given
         directories
    cpset(1M) — installs files in specified directories
    dev kill(1M) — removes device files from a directory
    getdirentries(2) — gets directory entries
    link(2) — provides a link to a file
    mkdir(2) — makes a directory file
    mknod(2) — makes a directory, or a special or ordinary file
    rmdir(2) — remove a directory file
    unlink(2) — remove directory entry
    directory(3) — perform operations on directories
    ftw(3C) — walks a file tree
    scandir(3) — scans a directory
```

```
dir(4) — format of System V directories
directory, current
    pwd(1) — prints the name of the working directory
     chdir(2) — changes the working directory
    get cwd(3C) — gets the pathname of the current working directory
     getwd(3) — gets the current working directory pathname
directory string functions
    basename(1) — get part of a pathname
     realpath(3) — returns the real filename of a file
disassembler
    dis(1) — produces an assembly language listing for a specified file
disk accounting
    df(1) — reports the used and unused storage capacity for a file system
    du(1) — summarizes disk usage
    diskusg(1M) — generates disk accounting data by user ID
disk blocks
    df(1) — reports the used and unused storage capacity for a file system
    du(1) — summarizes disk usage
    badblk(1M) — sets or updates bad block information
    bcopy(1M) — copies blocks interactively
    altblk(4) — alternate block information for bad block handling
    bzb(4) — Block Zero Block file format
disk drives
    eject(1) — ejects a diskette from the drive
disk partitions
    dd(1) — converts and copies a file
    dp(1M) — performs disk partitioning
    pname(1M) — associates named partitions with device files
    getptabent(3) — get partition table file entry
    bzb(4) — Block Zero Block file format
    dpme(4) — format of disk partition map entries
    ptab(4) — partition table file
disks, floppy
    cpio(1) — copies files to or from a cpio archive
    eject(1) — ejects a diskette from the drive
    pax(1) — copies files to or from an archive in an IEEE format
    tar(1) — copies files to or from a tar archive
    diskformat(1M) — formats a disk through a driver-dependent format
         operation
    finstall(1M) — installs A/UX software from specially prepared floppy
         disks
    cpio(4) — format of cpio archive
    finstallrc(4) — finstall default configuration file
    tar(4) — format of tar header
```

```
fd(7) — provides an interface to 3.5-inch disk drives
disks, formatting
    diskformat(1M) — formats a disk through a driver-dependent format
         operation
disks, general
    df(1) — reports the used and unused storage capacity for a file system
    du(1) — summarizes disk usage
    eject(1) — ejects a diskette from the drive
    diskformat(1M) — formats a disk through a driver-dependent format
         operation
    fsck(1M) — checks file-system consistency and interactively repairs the
         file system
    fsync(2) — synchronize a file's in-core state with that on disk
    disktab(4) — disk description file format
    fstab(4) — parameter file format
    gd(7) — provides a generic interface to disk devices
display processing
    300(1) — filter text containing printer control sequences for a DASI
         terminal
    4014(1) — filters text containing printer control sequences a page at a
         time
    450(1) — filters text containing printer control sequences for the DASI
         terminal
    col(1) — filters text containing printer control sequences for use at a
         display device
    colcrt(1) — filters nroff output for terminal previewing
    greek(1) — filters text for vintage display devices
    tc(1) — interprets troff output for use at a vintage display device
    tplot(1G) — interprets plotter instructions for use at a vintage display
         device
    u1(1) — filters special underlining sequences imbedded in text for use at a
         display device
dividing files
    csplit(1) — splits files into sections
    split(1) — splits a file into a specified number of pieces
documentation, online
    apropos(1) — locates commands by keyword
    man(1) — displays the named manual page entries
    whatis(1) — reports a brief description for the manual page entry
         specified
    whereis(1) — reports the locations of the source, binary, and online help
         files for a specified command
    man(5) — macros for formatting entries in this manual
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domains
    domainname(1) — sets or displays the name of the Network Information
         Service (NIS) domain
    named(1M) — provides Internet domain name service
    resolver(3N) — provide resolver routines
    HOSTNAME(4) — host name and domain name database
    resolv.conf(4) — configuration file for resolver routines
double-precision numbers
    aint(3F) — Fortran integer part intrinsic function
    dprod(3F) — Fortran double precision product intrinsic function
    strtod(3C) — converts a string to a double-precision number
drawing
    grap(1) — invokes a pic preprocessor for drawing graphs
    graph(1G) — draws a graph
    pic(1) — preprocesses troff files that contain drawings
drawings, generation of graphs and curves
    graph(1G) — draws a graph
    spline(1G) — interpolates a smooth curve
drawings, plotter, filtering for display purposes
    tplot(1G) — interprets plotter instructions for use at a vintage display
         device
drivers
    console(7) — provides access to the console keyboard and screen
    fd(7) — provides an interface to 3.5-inch disk drives
    gd(7) — provides a generic interface to disk devices
    intro(7) — introduces device drivers and interfaces
    mouse(7) — provides a mouse input device driver
    pty(7) — provides a pseudo terminal driver
    serial(7) — provides the on-board serial ports
    sxt(7) — provides a pseudo-device driver
    tc(7) — tape device driver
DTS 300 terminal
    300(1) — filter text containing printer control sequences for a DASI
         terminal
duration
    time(1) — prints the elapsed time during the execution of a command
    timex(1) — reports the elapsed, user, and system time during the
         execution of a command
editors
    TextEditor(1) — lets you edit files interactively through mouse and
         menu operations
    bfs(1) — edits big files
    ed(1) - edit text
    ex(1) — edit text
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n1(1) — processes a file through a line numbering filter
    sed(1) — edits a stream of data
    ssp(1) — produces single spaced output
    vi(1) — invokes the screen-oriented (visual) display editor
effective group ID
    getuid(2) — get real and effective user IDs and group IDs
    setregid(2) — sets real and effective group ID
effective user ID
    su(1) — substitutes user ID
    getuid(2) — get real and effective user IDs and group IDs
    setreuid(2) — set real and effective user ID
    setsid(2P) — create session and set process group ID
emulation, terminal
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
    vt102(7) — provides protocols for VT102 terminals
enablers
    enable(1) — enable or disable LP printers
    mesq(1) — permits or denies the receipt of messages
    accept(1M) — allows 1p requests
    acct(2) — enable or disable process accounting
    phys(2) — allows a process to access physical addresses
encryption
    crypt(1) — encodes and decodes passwords
    makekey(1) — generates an encryption key
    crypt(3C) — generate DES encryption
environment
    env(1) — sets the environment for command execution
    printenv(1) — displays the value of variables set in the current
         environment
    getenv(3C) — return value for environment name
    getenv(3F) — return Fortran environment variable
    putenv(3C) — changes existing environmental variable values or adds
         new ones
    profile(4) — setting up an environment at login time
    environ(5) — user environment
error functions
    erf(3M) — error function and complementary error function
    matherr(3M) — provides an error-handling function
error logging
    mkstr(1) — creates an error message file by massaging C source
         programs
    errdemon(1M) — calls the error-logging daemon
    errpt(1M) — processes a report of logged errors
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errstop(1M) — terminates the error-logging daemon
    errfile(4) — error-log file format
    error(7) — interfaces between processes and error-record collection
         routines
errors, general
    errdead(1M) — extracts error records from a crash dump
    exterr(1M) — turns on/off the reporting of extended errors
    intro(2) — introduces system calls and error numbers
    matherr(3M) — provides an error-handling function
    perror(3C) — produce system error messages
Ethernet
    checkinstall(1) — checks the installation of boards
    etheraddr(1M) — displays the Ethernet address of each Ethernet card
         in your system
    ether(3N) — monitors Ethernet traffic
    ethers(3N) — provide Ethernet address mapping operations
    ethers(4) — Ethernet address to host name database or YP domain
    ae(5) — 3Com 10 Mb/s Ethernet interface
    arp(5P) — Address Resolution Protocol
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    hypot(3M) — provides the Euclidean distance function
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    basename(1) — get part of a pathname
    expr(1) — evaluates arguments as an expression
    test(1) — evaluates conditions
execution, general
    apply(1) — passes its arguments in batches to a command that is run
         once per every batch
    at(1) — run commands at a later time
    env(1) — sets the environment for command execution
    launch(1) — runs a Macintosh binary application in A/UX
    nice(1) — executes a command at low priority
    nohup(1) — runs a command so that it can continue to run even after your
         session has ended
    remsh(1N) — invokes to a shell on a remote system
    sleep(1) — suspends the system for a specified interval of time
    uux(1C) — runs a command on a remote system
    xarqs(1) — builds arguments based on the standard input, passing them
         in batches to the specified command which is executed enough times
         to deplete all the arguments
    cron(1M) — runs the clock daemon
    rexecd(1M) — server for remote executions
    uuxqt(1M) — handles requests from remote systems to run commands
    exec(2) — execute a file
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regcmp(3X) — compile and execute a regular expression
     sleep(3C) — suspends execution for interval
     usleep(3) — suspend execution for interval
execution profile
     prof(1) — displays profile data
     time(1) — prints the elapsed time during the execution of a command
     timex(1) — reports the elapsed, user, and system time during the
         execution of a command
    profil(2) — reports the execution time of an application
    monitor(3C) — prepares an execution profile
expanding and compressing files
     compact(1) — compress and uncompress files
     compress(1) — compress files and directories as well as expand them;
         support concatenation, browsing, and file-comparing operations upon
         compressed files
     crypt(1) — encodes and decodes passwords
    makekey(1) — generates an encryption key
    pack(1) — compress and expand files
exponents
     exp(3F) — Fortran exponential intrinsic function
     exp(3M) — provide exponential, logarithm, power, and square root
         functions
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    basename(1) — get part of a pathname
     expr(1) — evaluates arguments as an expression
expressions, regular
    grep(1) — search a file for a specific pattern
    regcmp(1) — compiles regular expressions with a file
    regcmp(3X) — compile and execute a regular expression
    regexp(5) — regular expression compile and match routines
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    greek(1) — filters text for vintage display devices
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     factor(1) — prints the prime factor of a given number
false and true
    test(1) — evaluates conditions
    true(1) - provides truth values
fields
    awk(1) — scans a file for lines that match a specific pattern
    colrm(1) — removes columns from a file
    cut(1) — cuts out selected fields of each line of a file
    join(1) — combines (joins) two relational files
    paste(1) — merges lines of several files or subsequent lines of one file
    sort(1) — sorts or merges files
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qsort(3C) — performs a quicker sort
file control
     touch(1) — updates access and modification times of a file
     fcnt1(2) — provides file control
     fcnt1(5) — file control options
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     umask(2) — set and get file creation mask
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     intro(4) — introduction to file formats
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    nfs_getfh(2) — gets a file handle
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     chmod(1) — changes the permissions of a file
     chown(1) — change the owner or group of a file
     cp(1) — copies files
     cpio(1) — copies files to or from a cpio archive
     csplit(1) — splits files into sections
     dd(1) — converts and copies a file
     fcnvt(1) — converts a file in one storage format to a different storage
         format
     file(1) — determines the type of a file
     find(1) — finds files
     head(1) — displays the first few lines of a file
     ln(1) — makes links
     1p(1) — spools print requests to printers
     lpq(1) — queries the print spooler for progress information
     lpr(1) — spools print requests to printers
     lprm(1) — removes jobs from the line printer spooling queue for a
         Berkeley file system (4.2)
    ls(1) — lists the contents of a directory
    mkdir(1) — creates a directory
    more(1) — show the contents of a file in display-size chunks
    mv(1) — moves or renames files
    pax(1) — copies files to or from an archive in an IEEE format
    pg(1) — shows the contents of a file in display-size chunks
    rcp(1C) — copies files between two systems
    rdist(1) -- distributes remote files
    rm(1) — remove files or directories
    setfile(1) — sets attributes for Macintosh files, such as file type and
         creator
    split(1) — splits a file into a specified number of pieces
    sum(1) — calculates a checksum
    tail(1) — displays the last part of a file
    tar(1) — copies files to or from a tar archive
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touch(1) — updates access and modification times of a file
     tp(1) — copies files to or from a tp archive
    updater(1) — updates files between two machines
    uusend(1C) — sends a file to a remote host
    uuto(1C) — provide an easy interface to the uucp command, using the
         public directories
    version(1) — reports version number of files
     clri(1M) — clears inodes
     ff(1M) — lists file names and statistics for a System V file system
     fuser(1M) — identifies processes using a file or file structure
     chown(2) — changes the owner and group of a file
     close(2) — closes a file descriptor
     creat(2) — creates a new file or rewrites an existing one
     exec(2) — execute a file
     link(2) — provides a link to a file
     lseek(2) — move read/write file pointer
    nfs getfh(2) — gets a file handle
    open(2) — opens a file for reading or writing
     read(2) — reads from a file
     symlink(2) — make symbolic link to a file
    truncate(2) — truncate a file to a specified length
    write(2) — write on a file
     fopen(3S) — open a stream
     fread(3S) — produce binary input/output
     fseek(3S) — reposition a file pointer in a stream
    tmpfile(3S) — creates a temporary file
     fspec(4) — syntax for format lines for newform
file merging
    cat(1) — catenates and displays the contents of files
    join(1) — combines (joins) two relational files
    merge(1) — merges three files into one
    paste(1) — merges lines of several files or subsequent lines of one file
    soelim(1) — eliminates the source commands from nroff input
     sort(1) — sorts or merges files
    tsort(1) — sorts lines in a file topologically
    acctmerg(1M) — merges or adds accounting files
file movina
    mv(1) — moves or renames files
filenames
    find(1) — finds files
    mv(1) — moves or renames files
    rename(2) — change the name of a file
    ctermid(3S) — generate filename for terminal
    mktemp(3C) — makes a unique filename
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realpath(3) — returns the real filename of a file
     tmpnam(3S) — create a name for a temporary file
     fstypes(4) — name-mapping information for file systems
file permissions
     chmod(1) — changes the permissions of a file
     chown(1) — change the owner or group of a file
     find(1) — finds files
     1s(1) — lists the contents of a directory
     chmod(2) — change mode of file
     umask(2) — set and get file creation mask
file pointers
     lseek(2) — move read/write file pointer
     fseek(3S) — reposition a file pointer in a stream
file reading
     cat(1) — catenates and displays the contents of files
    head(1) — displays the first few lines of a file
     line(1) — reads one line from the standard input
    more(1) — show the contents of a file in display-size chunks
    pg(1) — shows the contents of a file in display-size chunks
     soelim(1) — eliminates the source commands from nroff input
     tail(1) — displays the last part of a file
     read(2) — reads from a file
     fread(3S) — produce binary input/output
     getc(3S) — get character or word from a stream
file regions
     locking(2) — provides exclusive file regions for reading or writing
     lockf(3C) — records locking on files
file scanning
     cat(1) — catenates and displays the contents of files
    head(1) — displays the first few lines of a file
    line(1) — reads one line from the standard input
    more(1) — show the contents of a file in display-size chunks
    pg(1) — shows the contents of a file in display-size chunks
    soelim(1) — eliminates the source commands from nroff input
    tail(1) — displays the last part of a file
    read(2) — reads from a file
     fread(3S) — produce binary input/output
    getc(3S) — get character or word from a stream
file status
    chmod(1) — changes the permissions of a file
    chown(1) — change the owner or group of a file
    file(1) — determines the type of a file
    find(1) — finds files
    ls(1) — lists the contents of a directory
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setfile(1) — sets attributes for Macintosh files, such as file type and
         creator
    sum(1) — calculates a checksum
    touch(1) — updates access and modification times of a file
    version(1) — reports version number of files
    ncheck(1M) — locates the filename associated with an i-number
    access(2) — determine accessibility of a file
    chmod(2) — change mode of file
    chown(2) — changes the owner and group of a file
    fsync(2) — synchronize a file's in-core state with that on disk
    stat(2) — get file status
    utime(2) — set file access and modification times
    stat(5) — data returned by stat system call
file system repair
    clri(1M) — clears inodes
     fsck(1M) — checks file-system consistency and interactively repairs the
         file system
     fsdb(1M) — debugs the file system
    ncheck(1M) — locates the filename associated with an i-number
    esch(8) — validates and repairs file systems from the A/UX Startup shell
file systems. Berkeley
    newfs(1M) — makes a Berkeley 4.2 (UFS) file system
    tunefs(1M) — tunes a Berkeley 4.2 (UFS) file system
    ufs(4) — UFS file-system format
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    bzb(4) — Block Zero Block file format
file systems, copying to backup media
    bcopy(1M) — copies blocks interactively
    dcopy(1M) — copies System V File System-style file systems for optimal
         access time
    dump.bsd(1M) — create a dump.bsd archive by making copies of files
         from a given file system
    escher(1M) — helps you with autorecovery administration
    eu(1M) — updates autorecovery files
    eupdate(1M) — updates important files for autorecovery purposes
    finc(1M) — generates a fast incremental backup for System V file
    frec(1M) — recovers files from a backup tape
    restore(1M) — retrieve files from within a dump. bsd archive into an
         existing file system
    volcopy(1M) — copy file systems with label checking
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file systems, display status of
    df(1) — reports the used and unused storage capacity for a file system
     du(1) — summarizes disk usage
file systems, general
     fstyp(1) — reports the file-system type
     sync(1) — updates the superblock
     automount(1M) — mounts Network File System (NFS) when needed
     clri(1M) — clears inodes
     devnm(1M) — displays the current device name
     export fs(1M) — exports and unexports directories to Network File
         System (NFS) clients
     ff(1M) — lists file names and statistics for a System V file system
     fsck(1M) — checks file-system consistency and interactively repairs the
         file system
     fsdb(1M) — debugs the file system
     fsentry(1M) — creates an entry in the file-system table
     fsirand(1M) — installs random inode generation numbers
     fsstat(1M) — reports the state of a file system
     fuser(1M) — identifies processes using a file or file structure
    mkfs1b(1M) — constructs a file system with 512-byte blocks
    mkfs(1M) — constructs a System V file system
    mklost+found(1M) — makes a directory named lost+found to be
         used by fsck
    mount (1M) — mount and unmount file systems
    mount d(1M) — invokes the Network File System (NFS) mount-request
    ncheck(1M) — locates the filename associated with an i-number
    newfs(1M) — makes a Berkeley 4.2 (UFS) file system
     tunefs(1M) — tunes a Berkeley 4.2 (UFS) file system
    volcopy(1M) — copy file systems with label checking
     fsmount(2) — mount a network file system (NFS)
    statfs(2) — gets file-system statistics
    umount(2) — unmount a file system
    unmount(2) — remove a file system
    ustat(2) — gets file system statistics
    exportent(3) — get exported file-system information
     fstyp(3) — determines the file-system type
     fstypent(3P) — gets a file-system-type entry
     ftw(3C) — walks a file tree
    getmntent(3) — get file system descriptor file entry
    mount(3) — mounts a file system
    mount(3N) — keeps track of remotely mounted file systems
    umount(3) — unmounts a file system
    dump.bsd(4) — format of a file-system dump
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exports(4) — directories to export to Network File System (NFS) clients
    fs(4) — file systems
    fstab(4) — parameter file format
    fstypes(4) — name-mapping information for file systems
    mtab(4) — mounted file system table
    rmtab(4) — remotely mounted file system table
    svfs(4) — System V system volume format
    ufs(4) — UFS file-system format
    esch(8) — validates and repairs file systems from the A/UX Startup shell
file systems, maintenance
    fstyp(1) — reports the file-system type
    sync(1) — updates the superblock
    clri(1M) — clears inodes
    devnm(1M) — displays the current device name
    ff(1M) — lists file names and statistics for a System V file system
    fsck(1M) — checks file-system consistency and interactively repairs the
         file system
    fsdb(1M) — debugs the file system
    fsentry(1M) — creates an entry in the file-system table
    fsirand(1M) — installs random inode generation numbers
    fsstat(1M) — reports the state of a file system
    fuser(1M) — identifies processes using a file or file structure
    mkfs1b(1M) — constructs a file system with 512-byte blocks
    mkfs(1M) — constructs a System V file system
    mklost+found(1M) — makes a directory named lost+found to be
         used by fsck
    mount (1M) — mount and unmount file systems
    ncheck(1M) — locates the filename associated with an i-number
    newfs(1M) — makes a Berkeley 4.2 (UFS) file system
    tunefs(1M) — tunes a Berkeley 4.2 (UFS) file system
file systems, NFS, maintenance of
    domainname(1) — sets or displays the name of the Network Information
         Service (NIS) domain
    automount(1M) — mounts Network File System (NFS) when needed
    export fs(1M) — exports and unexports directories to Network FIle
         System (NFS) clients
    lockd(1M) — handle local and remote lock requests
    mountd(1M) — invokes the Network File System (NFS) mount-request
         server
    nfsd(1M) — invoke the NFS daemons
    nfsstat(1M) — displays Network File System (NFS) statistics
    rpcinfo(1M) — reports RPC information
    showmount(1M) — shows all remote mounts
    spray(1M) — sprays packets
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sprayd(1M) — returns information for the spray command
    statd(1M) — provide crash and recovery monitoring for network locking
         services
file systems, System V
    mkfs(1M) — constructs a System V file system
    dir(4) — format of System V directories
    inode(4) — format of a System V inode
    svfs(4) — System V system volume format
file systems, unmounting
    umount(2) — unmount a file system
    unmount(2) — remove a file system
    umount(3) — unmounts a file system
file transfers
    cpio(1) — copies files to or from a cpio archive
    cu(1C) — establishes an interactive connection with another system
    ftp(1N) — transfers files by using the DARPA Internet File Transfer
         Protocol (FTP)
    kermit(1C) — invokes the Kermit file-transfer program
    pax(1) — copies files to or from an archive in an IEEE format
    rcp(1C) — copies files between two systems
    remsh(1N) — invokes to a shell on a remote system
    tar(1) — copies files to or from a tar archive
    tftp(1C) — transfers files via the Trivial File Transfer Protocol (TFTP)
    tip(1C) — establishes a connection to a remote system
    updater(1) — updates files between two machines
    uucp(1C) — copies files from one system to another system
    uuencode(1C) — encode and decode a binary file
    ftpd(1M) — provide Internet File Transfer Protocol (FTP) service
    tftpd(1M) — responds to requests to use the DARPA Trivial File
         Transfer Protocol
    uucico(1M) — transfers files as specified by uucp work files
file types
    file(1) — determines the type of a file
    find(1) — finds files
    magic(4) — magic number file for file command
file writing
    write(2) — write on a file
files, archive
    ar(1) — maintains a library of files in an archive
    cpio(1) — copies files to or from a cpio archive
    lorder(1) — finds the ordering relation for an object library
    pax(1) — copies files to or from an archive in an IEEE format
    tar(1) — copies files to or from a tar archive
    1dahread(3X) — reads the archive header of a member of an archive file
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ar(4) — common archive file format
     cpio(4) — format of cpio archive
     tar(4) — format of tar header
files, bia
     bdiff(1) — compares the difference between two large files that are too
         big for diff to handle
     bfs(1) — edits big files
files, browsing
     head(1) — displays the first few lines of a file
     more(1) — show the contents of a file in display-size chunks
     pg(1) — shows the contents of a file in display-size chunks
     tail(1) — displays the last part of a file
files, comparing
     bdiff(1) — compares the difference between two large files that are too
         big for diff to handle
     cmp(1) — compares two files
     comm(1) — selects or rejects lines common to two sorted files
     diff3(1) — compares three versions of a file
     diff(1) — compares two files or directories for any differences
     dircmp(1) — compares the contents of two directories
     merge(1) — merges three files into one
     rcsdiff(1) — compares RCS revisions
     sccsdiff(1) — compares two versions of an SCCS file
     sdiff(1) — reports side-by-side differences between two files in a side-
         by-side format
     sumdir(1) — sums and counts the characters within the files of the given
         directories
     ucbdiff3(1) — reports the differences between three files
     ucbdiff(1) — reports differences between two files or directories
     uniq(1) — reports repeated lines in a file
files, compressing and expanding
     compact(1) — compress and uncompress files
     compress(1) — compress files and directories as well as expand them;
         support concatenation, browsing, and file-comparing operations upon
         compressed files
     crypt(1) — encodes and decodes passwords
    makekey(1) — generates an encryption key
    pack(1) — compress and expand files
files, copying
     atprint(1) — transfers data to a printer by using AppleTalk protocols
     cp(1) — copies files
     cpio(1) — copies files to or from a cpio archive
     csplit(1) — splits files into sections
     dd(1) — converts and copies a file
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fcnvt(1) — converts a file in one storage format to a different storage
         format
     ln(1) — makes links
     pax(1) — copies files to or from an archive in an IEEE format
     rcp(1C) — copies files between two systems
     split(1) — splits a file into a specified number of pieces
     tar(1) — copies files to or from a tar archive
     tp(1) — copies files to or from a tp archive
     uucp(1C) — copies files from one system to another system
     uuto(1C) — provide an easy interface to the uucp command, using the
         public directories
     bcopy(1M) — copies blocks interactively
     dcopy(1M) — copies System V File System-style file systems for optimal
         access time
     dump.bsd(1M) — create a dump.bsd archive by making copies of files
         from a given file system
     restore(1M) — retrieve files from within a dump. bsd archive into an
         existing file system
     volcopy(1M) — copy file systems with label checking
     blt(3C) — block transfer data
     cpio(4) — format of cpio archive
     tar(4) — format of tar header
files, device description
     printcap(4) — printer-capability database
     termcap(4) — terminal capability database
     terminfo(4) — terminal capability database
files, displaying status of
     file(1) — determines the type of a file
     1s(1) — lists the contents of a directory
     sum(1) — calculates a checksum
     version(1) — reports version number of files
files, dividing
     csplit(1) — splits files into sections
     split(1) — splits a file into a specified number of pieces
files, FIFO
    mkfifo(3P) — makes a FIFO special file
files, finding
     find(1) — finds files
files, manipulating
     cp(1) — copies files
     cpio(1) — copies files to or from a cpio archive
     csplit(1) — splits files into sections
     dd(1) — converts and copies a file
     fcnvt(1) — converts a file in one storage format to a different storage
```

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format
     ln(1) — makes links
    mkdir(1) — creates a directory
    mv(1) — moves or renames files
    pax(1) — copies files to or from an archive in an IEEE format
    rcp(1C) — copies files between two systems
    rm(1) — remove files or directories
    split(1) — splits a file into a specified number of pieces
     tar(1) — copies files to or from a tar archive
    tp(1) — copies files to or from a tp archive
files, meraina
    cat(1) — catenates and displays the contents of files
     join(1) — combines (joins) two relational files
    merge(1) — merges three files into one
    paste(1) — merges lines of several files or subsequent lines of one file
    soelim(1) — eliminates the source commands from nroff input
    sort(1) — sorts or merges files
    tsort(1) — sorts lines in a file topologically
    acctmerg(1M) — merges or adds accounting files
files, Name Information Server
    makedbm(1M) — generates a Network Information Service (NIS) dbm
         file
files, printing
    cancel(1) — cancels print requests spooled through the 1p command
    1p(1) — spools print requests to printers
    lpq(1) — queries the print spooler for progress information
    lpr(1) — spools print requests to printers
    1prm(1) — removes jobs from the line printer spooling queue for a
         Berkeley file system (4.2)
files, RCS
    ci(1) — checks in RCS revisions
    co(1) — checks out RCS revisions
    ident(1) — displays RCS keywords and their values
    merge(1) — merges three files into one
    rcs(1) — creates new RCS files or changes attributes of existing RCS files
    rcsdiff(1) — compares RCS revisions
    rcsintro(1) — introduces RCS commands
    rcsmerge(1) — merges two versions of an RCS file
    rlog(1) — displays log messages and other information about RCS files
    ucbdiff3(1) — reports the differences between three files
    ucbdiff(1) — reports differences between two files or directories
    sccstorcs(1M) — builds an RCS file from an SCCS file
    rcsfile(4) — format of an RCS file
```

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files, SCCS
    admin(1) — creates and administers SCCS files
    cdc(1) — changes the delta commentary of an SCCS delta
    comb(1) — combines SCCS deltas
    delta(1) — makes a delta (change) to an SCCS file
    get(1) — gets a version of an SCCS file
    help(1) — provides help information about SCCS commands and
         messages
    prs(1) — displays information about an SCCS file
    rmdel(1) — removes a delta from an SCCS file
    sact(1) — displays who has checked a Source Code Control System
         (SCCS) file out for editing
    SCCS(1) — performs SCCS subsystem commands
    sccsdiff(1) — compares two versions of an SCCS file
    unget(1) — undoes a previous get of an SCCS file
    val(1) — validate SCCS file
    what(1) — reports identification information for a file
    sccstorcs(1M) — builds an RCS file from an SCCS file
    sccsfile(4) — format of an SCCS file
files, searching for
    find(1) — finds files
finding files
    find(1) — finds files
flag options
    getopt(1) — parses command options
    getopt(3C) — get option letter from argument vector
floating-point numbers
    atof(3C) — converts an ASCII string to floating-point number
    ecvt(3C) — convert floating-point number to string
    frexp(3C) — manipulate parts of floating-point numbers
floor numbers
    floor(3M) — floor, ceiling, remainder, absolute value functions
floppy disks
    cpio(1) — copies files to or from a cpio archive
    eject(1) — ejects a diskette from the drive
    pax(1) — copies files to or from an archive in an IEEE format
    tar(1) — copies files to or from a tar archive
    diskformat(1M) — formats a disk through a driver-dependent format
         operation
    finstall(1M) — installs A/UX software from specially prepared floppy
         disks
    cpio(4) — format of cpio archive
    finstallrc(4) — finstall default configuration file
    tar(4) — format of tar header
```

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fd(7) — provides an interface to 3.5-inch disk drives
flowgraphs
    cflow(1) — generates a C flowgraph
font files, troff
    makedev(1) — prepares troff description files
    afm(4) — Adobe PostScript font metrics file format
     font(5) — description files for device-independent troff
footnotes
    mm(1) — formats documents that contain nroff and mm macro
         formatting requests
    refer(1) — finds and inserts literature references in documents
    me(5) — macros for formatting papers
    mm(5) — macro package for formatting documents
    ms(5) — text formatting macros
format checkers
    checkmm(1) — check documents formatted with the mm macros
    checknr(1) — checks nroff/troff files
    lint(1) — invokes a C program checker
format macros
    checkmm(1) — check documents formatted with the mm macros
    m4(1) — processes macros for C and other languages
    macref(1) — produces a cross-reference listing of macro files
    mm(1) — formats documents that contain nroff and mm macro
         formatting requests
    man(5) — macros for formatting entries in this manual
    me(5) — macros for formatting papers
    mm(5) — macro package for formatting documents
    mptx(5) — the macro package for formatting a permuted index
    ms(5) — text formatting macros
    mv(5) — a troff macro package for typesetting viewgraphs and slides
formatters, disk
    diskformat(1M) — formats a disk through a driver-dependent format
         operation
formatters, text
    daps(1) — invokes the Autologic APS-5 phototypesetter troff post-
         processor
    enscript(1) — converts text files to format for printing
    eqn(1) — format mathematical text for troff
    fmt(1) — invokes a simple text formatter
    fold(1) — folds long lines for finite-width output device
    mm(1) — formats documents that contain nroff and mm macro
         formatting requests
    mmt(1) — typeset documents that contain troff and mm or my macro-
         formatting requests
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mvt(1) — typeset documents that contain troff and mm or mv macro-
         formatting requests
    negn(1) — formats mathematical text for nroff
    newform(1) — changes the format of a text file
    nroff(1) — text formatter
    otroff(1) — formats text for a specific phototypesetter
    pr(1) — formats text for a print device
    psdit(1) — converts troff intermediate format to POSTSCRIPT format
    psroff(1) — formats a file through troff so it can be printed on a
         POSTSCRIPT printer
    roffbib(1) — prints out all records in a bibliographic database
    tbl(1) — table formatter for nroff or troff
    troff(1) — formats and typesets files
Fortran facilities
    asa(1) — interprets ASA carriage control characters
    ef1(1) — invokes the Extended Fortran Language
    £77(1) — invokes the Fortran 77 compiler
    fpr(1) — filters the output of Fortran programs for line printing
    fsplit(1) — splits f77 or ef1 files
    abort(3F) — terminates a Fortran program
    abs(3F) — Fortran absolute value
    acos(3F) — Fortran arccosine intrinsic function
    aimag(3F) — Fortran imaginary part of complex argument
    aint(3F) — Fortran integer part intrinsic function
    asin(3F) — Fortran arcsine intrinsic function
    atan2(3F) — Fortran arctangent intrinsic function
    atan(3F) — Fortran arctangent intrinsic function
    bool(3F) — Fortran bitwise boolean functions
    conjg(3F) — Fortran complex conjugate intrinsic function
    cos(3F) — Fortran cosine intrinsic function
    cosh(3F) — Fortran hyperbolic cosine intrinsic function
    dim(3F) — Fortran positive difference intrinsic functions
    dprod(3F) — Fortran double precision product intrinsic function
    exp(3F) — Fortran exponential intrinsic function
    ftype(3F) — explicit Fortran type conversion
    getarg(3F) — return Fortran command-line argument
    getenv(3F) — return Fortran environment variable
    iargc(3F) — return command line arguments
    index(3F) — return location of Fortran substring
    1en(3F) — return length of Fortran string
    lge(3F) — string comparision intrinsic functions
    log10(3F) — Fortran common logarithm intrinsic function
    log(3F) — Fortran natural logarithm intrinsic function
    max(3F) — provides Fortran maximum-value functions
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mclock(3F) — returns Fortran time accounting
    min(3F) — provide Fortran minimum-value functions
    mod(3F) — provide Fortran remaindering intrinsic functions
    rand(3F) — provide a Fortran uniform random-number generator
    round(3F) — provide Fortran nearest integer functions
    sign(3F) — returns Fortran transfer-of-sign intrinsic functions
    signal(3F) — specifies Fortran action on receipt of a system signal
    sin(3F) — provide Fortran sine intrinsic functions
    sinh(3F) — provide Fortran hyperbolic sine intrinsic function
    sgrt(3F) — provide Fortran square root intrinsic functions
     system(3F) — issues a shell command from Fortran
    tan(3F) — Fortran tangent intrinsic function
     tanh(3F) — Fortran hyperbolic tangent intrinsic function
Fortran programming
    asa(1) — interprets ASA carriage control characters
    ef1(1) — invokes the Extended Fortran Language
     f 77(1) — invokes the Fortran 77 compiler
     fpr(1) — filters the output of Fortran programs for line printing
     fsplit(1) — splits f77 or ef1 files
full-duplex
    shutdown(2N) — shut down part of a full-duplex connection
    termio(7) — provides a general terminal interface
    termios(7P) — provides a A/UX® POSIX general terminal interface
games
    aliens(6) — plays the game of Space Invaders (A/UX version)
    arithmetic(6) — provides arithmetic problems
    autorobots (6) — plays the game of autorobots
    back(6) — plays the game of backgammon
    bcd(6) — simulates a punched card corresponding to a text argument
    bj(6) — plays the game of black jack
    chase(6) — plays the game of chase
    craps(6) — plays the game of craps
    cribbage(6) — plays the game of cribbage
    fish(6) — plays the game of Go Fish"
    fortune(6) — plays the game of fortune telling
    hangman(6) — plays the game of hangman
    intro(6) — introduction to games
    life(6) — plays the game of life
    mastermind(6) — plays the game of Mastermind
    maze(6) — generates a maze
    moo(6) — plays the game of moo
    number(6) — converts Arabic numerals to English
    quiz(6) — gives associative knowledge tests on various subjects
    rain(6) — animates raindrops
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robots(6) — plays the game of robots
    trek(6) — plays the game of trek
    ttt(6) — play the game of tic-tac-toe
    twinkle(6) — plays the game of twinkle, twinkle little stars
    worm(6) — plays the game of growing worm
    worms(6) — plays the game of worms
    wump(6) — plays the game of hunt-the-wumpus
gamma function
    gamma(3M) — logs a gamma function
geometry
    hypot(3M) — provides the Euclidean distance function
go fish
    fish(6) — plays the game of Go Fish"
goto
    setjmp(3C) — provide non-local goto
    sigsetjmp(3P) — provide non-local jumps
graphics
    graph(1G) — draws a graph
    pic(1) — preprocesses troff files that contain drawings
    spline(1G) — interpolates a smooth curve
    tplot(1G) — interprets plotter instructions for use at a vintage display
         device
    plot(3X) — provide graphics interface subroutines
    plot(4) — graphics interface
graphs
    grap(1) — invokes a pic preprocessor for drawing graphs
    graph(1G) — draws a graph
group access lists
    getgroups(2) — gets group access list
    setgroups(2) — sets group access list
    initgroups(3) — initializes group access list
aroup IDs
    id(1) — displays user and group IDs and names
    setuid(2) — set user and group ID
    group(4) — group file format
    passwd(4) — password file
groups
    chown(1) — change the owner or group of a file
    groups(1) — displays group memberships
    id(1) — displays user and group IDs and names
    newgrp(1) — logs you into a new group
    pwck(1M) — check the password/group files
    chown(2) — changes the owner and group of a file
    getgroups(2) — gets group access list
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getuid(2) — get real and effective user IDs and group IDs
    setgroups(2) — sets group access list
    setregid(2) — sets real and effective group ID
     setuid(2) — set user and group ID
    getgrent(3C) — obtain group file entry from a group file
     initgroups(3) — initializes group access list
     group(4) — group file format
GSI 300 terminal
     300(1) — filter text containing printer control sequences for a DASI
         terminal
half-duplex
    shutdown(2N) — shut down part of a full-duplex connection
     termio(7) — provides a general terminal interface
     termios(7P) — provides a A/UX® POSIX general terminal interface
halting execution
    kill(1) — terminates a process
    killall(IM) — kills all active processes
    exit(2) — terminate process
    kill(2) — sends a signal to a process or a group of processes
    reboot(2) — reboot system or halt processor
handle, file
    nfs getfh(2) — gets a file handle
hangman
    hangman(6) — plays the game of hangman
hash tables
    hsearch(3C) — manage hash search tables
help, command options
    cmdo(1) — builds command lines interactively
help, online
    apropos(1) — locates commands by keyword
    man(1) — displays the named manual page entries
    what is(1) — reports a brief description for the manual page entry
         specified
    whereis(1) — reports the locations of the source, binary, and online help
         files for a specified command
    which(1) — reports the directory path to a file by interpreting PATH and
         alias settings
host names
    HOSTNAME(4) — host name and domain name database
    ethers(4) — Ethernet address to host name database or YP domain
    hosts.equiv(4) — files containing a list of trusted hosts
    hosts(4) — host name database
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hosts
    hostid(1N) — sets or displays the identifier of the current host system
    hostname(1N) — sets or displays the name of the current host system
    uname(1) — displays identification information about the current system
    uname(2) — get name of current system
    byteorder(3N) — convert values between host and network byte order
    gethostbyaddr(3N) — get network host entry
    hosts.equiv(4) — files containing a list of trusted hosts
    hosts(4) — host name database
    remote(4) — remote host description file
    rhosts(4N) — trusted hosts file format
    slip.hosts(4) — maps login names to Compressed Serial Line/Internet
         Protocl (CSL/IP) client host names
HUGE (constant)
    math(5) — math functions and constants
hyperbolic functions
    cosh(3F) — Fortran hyperbolic cosine intrinsic function
    sinh(3F) — provide Fortran hyperbolic sine intrinsic function
    sinh(3M) — provide hyperbolic functions
    tanh(3F) — Fortran hyperbolic tangent intrinsic function
hyphenation
    hyphen(1) — finds hyphenated words
I/O management
    query(1) — queries the user for input
    tee(1) — transcribes data
    ioct1(2) — requests low-level, input/output operations for specific
         devices
    select(2N) — synchronous I/O multiplexing
    cfgetospeed(3P) — get or set the value of the output and input baud
         rate
    fread(3S) — produce binary input/output
    fseek(3S) — reposition a file pointer in a stream
    print f(3S) — format and output string and numeric data
    scanf(3S) — convert formatted input
    streams(7) — provides an interface for character I/O
ICMP
    icmp(5P) — Internet Control Message Protocol
IDs
    id(1) — displays user and group IDs and names
    setuid(2) — set user and group ID
    auxstartuprc(4) — authorization file that helps password-protect and
         otherwise secure A/UX Startup
    group(4) — group file format
    passwd(4) — password file
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ImageWriter
     iw2(1) — prepares data to be printed on the Apple ImageWriter II printer
indexing
     indxbib(1) — builds an inverted index for a bibliography
    ndx(1) — creates a subject-page index for a document
    ptx(1) — generates a permuted index
initialization
     tset(1) — set or reset the terminal to a sensible state
    brc(1M) — execute system initialization shell scripts
     init(1M) — spawn general processes
     inittab(4) — script for the init process
inittab file
    init(1M) — spawn general processes
     tty add(1M) — modify the /etc/inittab file in terms of enabling
         serial ports for use as login terminals
     inittab(4) — script for the init process
inodes
    clri(1M) — clears inodes
     fsck(1M) — checks file-system consistency and interactively repairs the
         file system
     fsirand(1M) — installs random inode generation numbers
    mkfs(1M) — constructs a System V file system
    ncheck(1M) — locates the filename associated with an i-number
    newfs(1M) — makes a Berkeley 4.2 (UFS) file system
    inode(4) — format of a System V inode
Input/Output management
    query(1) — queries the user for input
    tee(1) — transcribes data
    ioct1(2) — requests low-level, input/output operations for specific
         devices
    select(2N) — synchronous I/O multiplexing
    cfgetospeed(3P) — get or set the value of the output and input baud
    fread(3S) — produce binary input/output
    fseek(3S) — reposition a file pointer in a stream
    printf(3S) — format and output string and numeric data
    scanf(3S) — convert formatted input
    soundinput(7) — provides interface conventions for the sound input
         driver
    streams(7) — provides an interface for character I/O
    vt102(7) — provides protocols for VT102 terminals
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installers
    cpset(1M) — installs files in specified directories
    finstall(1M) — installs A/UX software from specially prepared floppy
         disks
    fsirand(1M) — installs random inode generation numbers
    install(IM) — places files in specified directories
    mklost+found(1M) — makes a directory named lost+found to be
         used by fsck
    ypinit(1M) — initializes Network Information Service (NIS) maps for
         master and slave servers
    finstallrc(4) — finstall default configuration file
integers
    bc(1) — processes an arbitrary-precision arithmetic language
    dc(1) — desk calculator
    expr(1) — evaluates arguments as an expression
    factor(1) — prints the prime factor of a given number
    abs(3C) — return integer absolute value
    abs(3F) — Fortran absolute value
    aint(3F) — Fortran integer part intrinsic function
    drand48(3C) — generate uniformly distributed pseudo-random numbers
    rand(3C) — call a simple random-number generator
    rand(3F) — provide a Fortran uniform random-number generator
    round(3F) — provide Fortran nearest integer functions
    strto1(3C) — convert strings to integer
interfaces
    telnet(1C) — communicates with another host via the TELNET
         protocol
    appletalk(1M) — enables you to configure and display AppleTalk
        network interfaces
    ifconfig(1M) — manages network interfaces
    atp(3N) — provide a AppleTalk Transaction Protocol (ATP) interface
    ddp(3N) — provide an AppleTalk Datagram Delivery Protocol (DDP)
        interface
    lap(3N) — AppleTalk Link Access Protocol (LLAP/ELAP) interface
    nbp(3N) — perform AppleTalk Name Binding Protocol (NBP) interface
        operations
    pap(3N) — provide AppleTalk Printer Access Protocol (PAP) interface
    plot(3X) — provide graphics interface subroutines
    set 42sig(3) — sets the Berkeley Software Distribution (BSD) 4.2 signal
         interface
    ypclnt(3N) — provide a Network Information Service (NIS) client
         interface
    zip(3N) — provide a AppleTalk Zone Information Protocol (ZIP)
        interface
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plot(4) — graphics interface
    slip.config(4) — establishes the number of available Compressed
         Serial Line/Internet Protocol (CSL/IP) connections
    ae(5) — 3Com 10 Mb/s Ethernet interface
    10(5) — software loopback network interface
    appletalk(7) — interfaces with the AppleTalk protocols
    error(7) — interfaces between processes and error-record collection
        routines
    qd(7) — provides a generic interface to disk devices
    intro(7) — introduces device drivers and interfaces
    mem(7) — provide an interface for access to core memory
    mtio(7) — provides an interface library for magnetic tape devices
    nvram(7) — provides an interface to nonvolatile memory
    streams(7) — provides an interface for character I/O
    termio(7) — provides a general terminal interface
    termios(7P) — provides a A/UX® POSIX general terminal interface
    tty(7) — controls the terminal interface
Internet Control Message Protocol
    icmp(5P) — Internet Control Message Protocol
Internet, general
    ftp(1N) — transfers files by using the DARPA Internet File Transfer
        Protocol (FTP)
    nslookup(1) — interactively queries name servers
    rmail(1) — handles remote mail received via UUCP
    tftp(1C) — transfers files via the Trivial File Transfer Protocol (TFTP)
    ftpd(1M) — provide Internet File Transfer Protocol (FTP) service
    inetd(1M) — starts Internet servers when needed
    named(1M) — provides Internet domain name service
    portmap(1M) — converts RPC program numbers into DARPA protocol
        port numbers
    sendmail(1M) — sends mail
    stdhosts(1M) — converts Internet addresses to standard form
    telnetd(1M) — supports the DARPA standard TELNET protocol
    tftpd(1M) — responds to requests to use the DARPA Trivial File
        Transfer Protocol
    inet(3N) — provide Internet address manipulation routines
    resolver(3N) — provide resolver routines
    networks(4N) — network name database
    protocols(4N) — protocol name database
    resolv.conf(4) — configuration file for resolver routines
    servers(4) — Internet server database
    services(4N) — service name database
    arp(5P) — Address Resolution Protocol
    icmp(5P) — Internet Control Message Protocol
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inet(5P) — Internet protocol family
    ip(5P) — Internet Protocol
    tcp(5P) — Internet Transmission Control Protocol
    udp(5P) — Internet User Datagram Protocol
interpolator
    soelim(1) — eliminates the source commands from nroff input
    spline(1G) — interpolates a smooth curve
interpreters
    bs(1) — compiles and interprets bs programs
    csh(1) — runs the C shell, a command interpreter with C-like syntax
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
    sh(1) — runs the Bourne shell
    sno(1) — runs the SNOBOL interpreter
    StartupShell(8) — interprets command lines such as those used to
         boot A/UX and check file systems within the A/UX Startup
         application
Interpreting commands
    csh(1) — runs the C shell, a command interpreter with C-like syntax
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
    sh(1) — runs the Bourne shell
interprocess communication
    ipcrm(1) — removes interprocess communications facilities
    ipcs(1) — reports interprocess communication facilities status
    kill(1) — terminates a process
    msgct1(2) — message control operations
    msgget(2) — gets message queue
    msgop(2) — message operations
    semct1(2) — semaphore control operations
    semget(2) — get set of semaphores
    semop(2) — performs semaphore operations
    shmct1(2) — shared memory control operations
    shmget(2) — get shared memory segment
    shmop(2) — shared memory operations
    ftok(3C) — standard interprocess communication package
interval timers
    getitimer(2) — get/set value of interval timer
IOT faults
    abort(3C) — generates an IOT fault
ISO encoding
    mactoiso(1) — convert between Macintosh encoding and International
         Standards Organization (ISO) encoding
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issue
     issue(4) — project identification file format
iob control
    at(1) — run commands at a later time
    crontab(1) — aids in the use of the cron process scheduling program
    csh(1) — runs the C shell, a command interpreter with C-like syntax
    env(1) — sets the environment for command execution
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
    nice(1) — executes a command at low priority
    nohup(1) — runs a command so that it can continue to run even after your
         session has ended
    sh1(1) — manages the layering of multiple shells
    sleep(1) — suspends the system for a specified interval of time
    yes(1) — generates y entries in response to requests for input
    chroot(1M) — changes the root directory for a command
    cron(1M) — runs the clock daemon
join files relationally
    join(1) — combines (joins) two relational files
Kermit
    kermit(1C) — invokes the Kermit file-transfer program
kernels
    uname(1) — displays identification information about the current system
    autoconfig(1M) — creates an up-to-date kernel
    chgnod(1M) — changes the current A/UX system node name
    kconfig(1M) — tunes kernel parameters for work-load optimization
    module\_dump(1M) — queries kernel files for configuration information
    ncstats(1M) — displays kernel name cache statistics
    newconfig(1M) — generates an up-to-date kernel
    newunix(1M) — manipulates the files that determine the configuration of
         a new kernel
    rstatd(1M) — invokes a server for kernel statistics
    uvar(2) — returns system-specific configuration information
    rstat(3N) — get performance data from remote kernel
    master(4) — master kernel-configuration file format
    mem(7) — provide an interface for access to core memory
    launch(8) — launches an A/UX kernel from the A/UX Startup
         environment
keyboard maps
    keyset(1M) — sets the keyboard for the console
keys (encryption)
    crypt(1) — encodes and decodes passwords
    makekey(1) — generates an encryption key
    crypt(3C) — generate DES encryption
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keywords
    apropos(1) — locates commands by keyword
     ident(1) — displays RCS keywords and their values
    ndx(1) — creates a subject-page index for a document
     subj(1) — generates a list of subjects from documents
    ypmatch(1) — lists the value of a specified key in a Network Information
         Service (NIS) map
Korn shell
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
labels
    volcopy(1M) — copy file systems with label checking
languages
    awk(1) — scans a file for lines that match a specific pattern
    bc(1) — processes an arbitrary-precision arithmetic language
    bs(1) — compiles and interprets bs programs
    cc(1) — invokes the C compiler
    cpp(1) — invokes the C language preprocessor
    csh(1) — runs the C shell, a command interpreter with C-like syntax
    ef1(1) — invokes the Extended Fortran Language
    eqn(1) — format mathematical text for troff
     f 77(1) — invokes the Fortran 77 compiler
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
    lex(1) — generates programs for simple lexical tasks
    neqn(1) — formats mathematical text for nroff
    nroff(1) — text formatter
    pic(1) — preprocesses troff files that contain drawings
    rpcgen(1) — generates C source code from a remote procedure call
         (RPC) source file
    sh(1) — runs the Bourne shell
    sno(1) — runs the SNOBOL interpreter
    tbl(1) — table formatter for nroff or troff
    troff(1) — formats and typesets files
    yacc(1) — compiles compilers (yet another compiler-compiler)
IAP
    lap(3N) — AppleTalk Link Access Protocol (LLAP/ELAP) interface
launching Macintosh applications from the command line
    launch(1) — runs a Macintosh binary application in A/UX
lexical analysis
    awk(1) — scans a file for lines that match a specific pattern
    lex(1) — generates programs for simple lexical tasks
```

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library management
     ar(1) — maintains a library of files in an archive
     mkshlib(1) — creates a shared library
life
     life(6) — plays the game of life
line counting
     wc(1) — counts characters, words, and lines in a file
line discipline
     stty(1) — sets the modes for a terminal
     line_sane(1M) — pushes streams line disciplines
     line_push(3) — routine used to push streams line disciplines
     termio(7) — provides a general terminal interface
line numbering
     1d(1) — invokes the link editor for common object files
     n1(1) — processes a file through a line numbering filter
     pr(1) — formats text for a print device
     strip(1) — strips symbol and line number information from an object file
     linenum(4) — line number entries in a common object file
lines, blank (in text)
     ssp(1) — produces single spaced output
lines, filling and wrapping
     fmt(1) — invokes a simple text formatter
     fold(1) — folds long lines for finite-width output device
lines, processing text within
     awk(1) — scans a file for lines that match a specific pattern
     colrm(1) — removes columns from a file
     comm(1) — selects or rejects lines common to two sorted files
     cut(1) — cuts out selected fields of each line of a file
     grep(1) — search a file for a specific pattern
     head(1) — displays the first few lines of a file
     join(1) — combines (joins) two relational files
     line(1) — reads one line from the standard input
     newform(1) — changes the format of a text file
     n1(1) — processes a file through a line numbering filter
     paste(1) — merges lines of several files or subsequent lines of one file
     rev(1) — reverses characters within each line of text
     sed(1) — edits a stream of data
     sort(1) — sorts or merges files
     tail(1) — displays the last part of a file
     unig(1) — reports repeated lines in a file
    wc(1) — counts characters, words, and lines in a file
```

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lines, repeated (in text)
    unig(1) — reports repeated lines in a file
lines, reversing characters within
    rev(1) — reverses characters within each line of text
Link Access Protocol
    lap(3N) — AppleTalk Link Access Protocol (LLAP/ELAP) interface
link editor (object code)
    1d(1) — invokes the link editor for common object files
    a.out(4) — common assembler and link editor output
links, file
    1n(1) — makes links
    link(2) — provides a link to a file
    readlink(2) — read value of a symbolic link
    symlink(2) — make symbolic link to a file
listenina
    listen(2N) — listens for connections on a socket
literary style
    diction(1) — locate wordy sentences in a document
    spell(1) — find spelling errors
    style(1) — analyzes the surface characteristics of documents
locking
    locking(2) — provides exclusive file regions for reading or writing
    plock(2) — enables a lock process for text or data in memory
    lockf(3C) — records locking on files
logarithms
    exp(3F) — Fortran exponential intrinsic function
    exp(3M) — provide exponential, logarithm, power, and square root
         functions
    log10(3F) — Fortran common logarithm intrinsic function
    log(3F) — Fortran natural logarithm intrinsic function
    math(5) — math functions and constants
logging in and logging out
    login(1) — signs you on a terminal session
    logname(1) — gets the login name
    newgrp(1) — logs you into a new group
    passwd(1) — changes the login password
    rlogin(1N) — logs in to a remote system
    Login(1M) — logs you in to A/UX by using a graphical user interface
    remlogin(1M) — runs on a remote system to log you in
    rlogind(1M) — server for remote logins
    getlogin(3C) — gets login name
    getusershell(3) — generate authenticated pathnames corresponding
         to executable shell programs
    logname(3X) — return login name of user
```

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auxstartuprc(4) — authorization file that helps password-protect and
         otherwise secure A/UX Startup
    issue(4) — project identification file format
    passwd(4) — password file
    profile(4) — setting up an environment at login time
    shells(4) — shell pathnames file
long integers
    a 641(3C) — convert between long integer and base-64 ASCII string
    drand48(3C) — generate uniformly distributed pseudo-random numbers
    13to1(3C) — convert between 3-byte integers and long integers
    sputl(3X) — access long integer data in a machine-independent fashion
    strto1(3C) — convert strings to integer
loopback (software)
    10(5) — software loopback network interface
lost+found
    mklost+found(1M) — makes a directory named lost+found to be
         used by fsck
Macintosh desktop
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
Macintosh dialog boxes
    Login(1M) — logs you in to A/UX by using a graphical user interface
    macquery(1M) — posts a Macintosh alert box to query the user
Macintosh environment, establishing preferences
    changesize(1) — changes or displays the fields of the 'SIZE' resource
         of a file
    mactoiso(1) — convert between Macintosh encoding and International
         Standards Organization (ISO) encoding
    systemfolder(1) — create a personal System Folder
    keyset(1M) — sets the keyboard for the console
Macintosh or Macintosh-related applications
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
    TextEditor(1) — lets you edit files interactively through mouse and
         menu operations
    changes ize(1) — changes or displays the fields of the 'SIZE' resource
         of a file
    derez(1) — decompiles a resource file
    launch(1) — runs a Macintosh binary application in A/UX
    mactoiso(1) — convert between Macintosh encoding and International
         Standards Organization (ISO) encoding
    rez(1) — compiles Macintosh resource files from source code
    setfile(1) — sets attributes for Macintosh files, such as file type and
         creator
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systemfolder(1) — create a personal System Folder
    Login(1M) — logs you in to A/UX by using a graphical user interface
    keyset(1M) — sets the keyboard for the console
    macquery(1M) — posts a Macintosh alert box to query the user
Macintosh resources
    derez(1) — decompiles a resource file
    fcnvt(1) — converts a file in one storage format to a different storage
         format
    rez(1) — compiles Macintosh resource files from source code
    set file(1) — sets attributes for Macintosh files, such as file type and
         creator
Macintosh toolbox
    slots(3X) — provides ROM library functions
Macintosh user interface
    cmdo(1) — builds command lines interactively
    macquery(1M) — posts a Macintosh alert box to query the user
macros, format
    checkmm(1) — check documents formatted with the mm macros
    m4(1) — processes macros for C and other languages
    macref(1) — produces a cross-reference listing of macro files
    mm(1) — formats documents that contain nroff and mm macro
         formatting requests
    man(5) — macros for formatting entries in this manual
    me(5) — macros for formatting papers
    mm(5) — macro package for formatting documents
    mptx(5) — the macro package for formatting a permuted index
    ms(5) — text formatting macros
    mv(5) — a troff macro package for typesetting viewgraphs and slides
magic numbers
    a.out(4) — common assembler and link editor output
    magic(4) — magic number file for file command
magnetic tape
    mt(1) — manipulates magnetic tape media
    tar(1) — copies files to or from a tar archive
    tcb(1) — blocks data to 8K for direct input to /dev/rmt/tcx
    tp(1) — copies files to or from a tp archive
    tar(4) — format of tar header
    mtio(7) — provides an interface library for magnetic tape devices
    tc(7) — tape device driver
mail handling
    biff(1) — enables and disables notification of mail by comsat
    from(1) — displays the mail header lines in your mailbox
    mail(1) — send mail to users or read mail
    mailx(1) — enables you to send and receive messages electronically
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mesq(1) — permits or denies the receipt of messages
    rmail(1) — handles remote mail received via UUCP
    talk(1N) — talks to another user via the terminal
    write(1) — writes to another user
    comsat(1M) — invokes the server for biff
    mailg(1M) — lists the contents of the mail queue
    newaliases(1M) — rebuilds the database for the mail aliases file
    sendmail(1M) — sends mail
    aliases(4) — address and alias format used by sendmail
mail system, maintenance of
    rmail(1) — handles remote mail received via UUCP
    comsat(1M) — invokes the server for biff
    mailq(1M) — lists the contents of the mail queue
    newaliases(1M) — rebuilds the database for the mail aliases file
    sendmail(1M) - sends mail
manual pages
    apropos(1) — locates commands by keyword
    man(1) — displays the named manual page entries
    whatis(1) — reports a brief description for the manual page entry
         specified
    whereis(1) — reports the locations of the source, binary, and online help
         files for a specified command
    man(5) — macros for formatting entries in this manual
masks
    sigblock(2) — block signals
    signause(2) — release blocked signals and wait for interrupt
    sigsetmask(2) — set current signal mask
    umask(2) — set and get file creation mask
    sigprocmask(3P) — examines and changes blocked signals
mastermind
    mastermind(6) — plays the game of Mastermind
mathematical text
    deroff(1) — removes nroff/troff, tbl, and egn constructs
    eqn(1) — format mathematical text for troff
    negn(1) — formats mathematical text for nroff
    egnchar(5) — special character definitions for egn and negn
mathematics
    bc(1) — processes an arbitrary-precision arithmetic language
    dc(1) — desk calculator
    abs(3C) — return integer absolute value
    abs(3F) — Fortran absolute value
    acos(3F) — Fortran arccosine intrinsic function
    aimag(3F) — Fortran imaginary part of complex argument
    aint(3F) — Fortran integer part intrinsic function
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asin(3F) — Fortran arcsine intrinsic function
atan2(3F) — Fortran arctangent intrinsic function
atan(3F) — Fortran arctangent intrinsic function
atof(3C) — converts an ASCII string to floating-point number
bessel(3M) — Bessel functions
bool(3F) — Fortran bitwise boolean functions
conjg(3F) — Fortran complex conjugate intrinsic function
cos(3F) — Fortran cosine intrinsic function
cosh(3F) — Fortran hyperbolic cosine intrinsic function
dim(3F) — Fortran positive difference intrinsic functions
dprod(3F) — Fortran double precision product intrinsic function
ecvt(3C) — convert floating-point number to string
exp(3F) — Fortran exponential intrinsic function
\exp(3M) — provide exponential, logarithm, power, and square root
    functions
floor(3M) — floor, ceiling, remainder, absolute value functions
frexp(3C) — manipulate parts of floating-point numbers
gamma(3M) — logs a gamma function
hypot(3M) — provides the Euclidean distance function
13to1(3C) — convert between 3-byte integers and long integers
log10(3F) — Fortran common logarithm intrinsic function
log(3F) — Fortran natural logarithm intrinsic function
matherr(3M) — provides an error-handling function
max(3F) — provides Fortran maximum-value functions
min(3F) — provide Fortran minimum-value functions
mod(3F) — provide Fortran remaindering intrinsic functions
rand(3C) — call a simple random-number generator
rand(3F) — provide a Fortran uniform random-number generator
round(3F) — provide Fortran nearest integer functions
sign(3F) — returns Fortran transfer-of-sign intrinsic functions
sin(3F) — provide Fortran sine intrinsic functions
sinh(3F) — provide Fortran hyperbolic sine intrinsic function
sinh(3M) — provide hyperbolic functions
sput 1(3X) — access long integer data in a machine-independent fashion
sgrt(3F) — provide Fortran square root intrinsic functions
strtod(3C) — converts a string to a double-precision number
strtol(3C) — convert strings to integer
tan(3F) — Fortran tangent intrinsic function
tanh(3F) — Fortran hyperbolic tangent intrinsic function
trig(3M) — provide trigonometric functions
math(5) — math functions and constants
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maximum values
    max(3F) — provides Fortran maximum-value functions
maze
    maze(6) — generates a maze
memory, general
    pagesize(1) — displays the system page size
    swap(1M) — adds disk blocks to or deletes them from the swap area
    brk(2) — change data segment space allocation
    phys(2) — allows a process to access physical addresses
    plock(2) — enables a lock process for text or data in memory
    end(3C) — last locations in program
    malloc(3C) — provide a main memory allocator
    malloc(3X) — provide a fast main memory allocator
    memory(3C) — perform memory operations
    core(4) — format of core image file
    mem(7) — provide an interface for access to core memory
memory, shared
    mkshlib(1) — creates a shared library
    shmct1(2) — shared memory control operations
    shmget(2) — get shared memory segment
    shmop(2) — shared memory operations
merging files
    cat(1) — catenates and displays the contents of files
    join(1) — combines (joins) two relational files
    merge(1) — merges three files into one
    paste(1) — merges lines of several files or subsequent lines of one file
    soelim(1) — eliminates the source commands from nroff input
    sort(1) — sorts or merges files
    tsort(1) — sorts lines in a file topologically
    acctmerg(1M) — merges or adds accounting files
message queue
    msgget(2) — gets message queue
messages
    ipcrm(1) — removes interprocess communications facilities
    ipcs(1) — reports interprocess communication facilities status
    mesq(1) — permits or denies the receipt of messages
    write(1) — writes to another user
    msgct1(2) — message control operations
    msgget(2) — gets message queue
    msgop(2) — message operations
    recv(2N) — receive a message from a socket
    send(2N) — send a message from a socket
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minimum values
    min(3F) — provide Fortran minimum-value functions
modems
    ct(1C) — runs login on a dial-up line
    cu(1C) — establishes an interactive connection with another system
    kermit(1C) — invokes the Kermit file-transfer program
    tip(1C) — establishes a connection to a remote system
    uucp(1C) — copies files from one system to another system
    uux(1C) — runs a command on a remote system
    slip(1M) — assigns a serial line to a network interface
    uucico(1M) — transfers files as specified by uucp work files
    dial(3C) — establishes an out-going terminal line connection
    dialup(4) — modem escape sequence file
    phones(4) — remote host telephone number database
modification times, file
    1s(1) — lists the contents of a directory
    touch(1) — updates access and modification times of a file
    utime(2) — set file access and modification times
monitor processing
    300(1) — filter text containing printer control sequences for a DASI
         terminal
    4014(1) — filters text containing printer control sequences a page at a
    450(1) — filters text containing printer control sequences for the DASI
         terminal
    col(1) — filters text containing printer control sequences for use at a
         display device
    colcrt(1) — filters nroff output for terminal previewing
    greek(1) — filters text for vintage display devices
    tc(1) — interprets troff output for use at a vintage display device
    tplot(1G) — interprets plotter instructions for use at a vintage display
         device
    u1(1) — filters special underlining sequences imbedded in text for use at a
         display device
moo
    moo(6) — plays the game of moo
Motorola S-records
    hex(1) — converts an object file to Motorola S-record format
    rcvhex(1) — receives and converts Motorola S-records from a port to a
         file
mounting file systems
    automount(1M) — mounts Network File System (NFS) when needed
    mount (1M) — mount and unmount file systems
    mountd(1M) — invokes the Network File System (NFS) mount-request
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server
    showmount(1M) — shows all remote mounts
    umount(2) — unmount a file system
    mount(3) — mounts a file system
    mount(3N) — keeps track of remotely mounted file systems
    fstab(4) — parameter file format
    mtab(4) — mounted file system table
mouse
    mouse(7) — provides a mouse input device driver
moving files
    mv(1) — moves or renames files
multiplexing
    select(2N) — synchronous I/O multiplexing
multiplication
    dprod(3F) — Fortran double precision product intrinsic function
name binding
    ypserv(1M) — provide Network Information Service (NIS) service
    bind(2N) — bind a name to a socket
    HOSTNAME(4) — host name and domain name database
Name Binding Protocol
    nbp(3N) — perform AppleTalk Name Binding Protocol (NBP) interface
         operations
name cache
    ncstats(1M) — displays kernel name cache statistics
Name Information Server
    domainname(1) — sets or displays the name of the Network Information
         Service (NIS) domain
    ypcat(1) — lists the contents of a Network Information Service (NIS)
    ypmatch(1) — lists the value of a specified key in a Network Information
         Service (NIS) map
    yppasswd(1) — changes a login password on the Network Information
         Service (NIS) master server
    ypwhich(1) — displays the host name of a system's Network Information
         Service (NIS) server
    makedbm(1M) — generates a Network Information Service (NIS) dbm
    revnetgroup(1M) — reverses the netgroup file
    ypinit(1M) — initializes Network Information Service (NIS) maps for
         master and slave servers
    ypmake(1M) — rebuilds the Network Information Service (NIS) maps
    yppasswdd(1M) — handle requests to change a password served by the
         Network Information Service (NIS)
    yppol1(1M) — reports the version of a Network Information Service
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(NIS) map that is on an NIS server
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- yppush(1M) propagates changed Network Information Service (NIS) maps
- ypserv(1M) provide Network Information Service (NIS) service
- ypset(1M) sets ypbind to a particular domain and Network Information Service (NIS) server
- ypxfr(1M) transfers a Network Information Service (NIS) map to the local system
- ypclnt(3N) provide a Network Information Service (NIS) client interface
- yppasswd(3N) updates a user password on the Network Information Service (NIS) master server
- ethers(4) Ethernet address to host name database or YP domain
- ypfiles(4) the Network Information Service (NIS) database and directory structure

Name Information Server maps

- ypwhich(1) displays the host name of a system's Network Information Service (NIS) server
- yppoll(1M) reports the version of a Network Information Service (NIS) map that is on an NIS server
- yppush(1M) propagates changed Network Information Service (NIS) maps
- ypxfr(1M) transfers a Network Information Service (NIS) map to the local system

name servers

- nslookup(1) interactively queries name servers
- ypcat(1) lists the contents of a Network Information Service (NIS) map

NBP

nbp(3N) — perform AppleTalk Name Binding Protocol (NBP) interface operations

network bridges

rtmp(3N) — identify AppleTalk node and bridge addresses

network domains

- ypwhich(1) displays the host name of a system's Network Information Service (NIS) server
- ypset(1M) sets ypbind to a particular domain and Network Information Service (NIS) server
- ${\tt get/set} \ name \ of \ current \ network \ domain$

Network File System

- domainname(1) sets or displays the name of the Network Information Service (NIS) domain
- automount(1M) mounts Network File System (NFS) when needed exportfs(1M) exports and unexports directories to Network File

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System (NFS) clients
    lockd(1M) — handle local and remote lock requests
    mountd(1M) — invokes the Network File System (NFS) mount-request
    nfsd(1M) — invoke the NFS daemons
    nfsstat(1M) — displays Network File System (NFS) statistics
    rpcinfo(1M) — reports RPC information
    showmount(1M) — shows all remote mounts
    spray(1M) — sprays packets
    sprayd(1M) — returns information for the spray command
    statd(1M) — provide crash and recovery monitoring for network locking
        services
    fsmount(2) — mount a network file system (NFS)
    nfssvc(2) — provides NFS daemons
    exportent(3) — get exported file-system information
    exports(4) — directories to export to Network File System (NFS) clients
    fstab(4) — parameter file format
network groups
    ypcat(1) — lists the contents of a Network Information Service (NIS)
        map
    revnetgroup(1M) — reverses the netgroup file
    getnetgrent(3N) — get network group entry
    netgroup(4) — list of network groups
network maintenance, Name Information Server
    ypcat(1) — lists the contents of a Network Information Service (NIS)
    ypmatch(1) — lists the value of a specified key in a Network Information
        Service (NIS) map
    yppasswd(1) — changes a login password on the Network Information
        Service (NIS) master server
    ypwhich(1) — displays the host name of a system's Network Information
        Service (NIS) server
    makedbm(1M) — generates a Network Information Service (NIS) dbm
    revnetgroup(1M) — reverses the netgroup file
    ypinit(1M) — initializes Network Information Service (NIS) maps for
        master and slave servers
    ypmake(1M) — rebuilds the Network Information Service (NIS) maps
    yppasswdd(1M) — handle requests to change a password served by the
        Network Information Service (NIS)
    yppol1(1M) — reports the version of a Network Information Service
        (NIS) map that is on an NIS server
    yppush(1M) — propagates changed Network Information Service (NIS)
        maps
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vpserv(1M) — provide Network Information Service (NIS) service
    vpset(1M) — sets ypbind to a particular domain and Network
         Information Service (NIS) server
    vpxfr(1M) — transfers a Network Information Service (NIS) map to the
         local system
network maintenance, UUCP system
    Uutry(1M) — contacts a remote system with debugging on
    uucheck(1M) — checks the uucp directories and files
    uucico(1M) — transfers files as specified by uucp work files
    uucleanup(1M) — removes old files from the uucp spool directory
    uucpd(1M) — handles the transfer of files by uucico over TCP/IP
         connections
    uudemon.admin(1M) — mails current uucp work status to the uucp
         administrator
    uudemon.cleanup(1M) — cleans up files in the uucp spool directory
    uudemon.hour(1M) — processes spooled uucp requests
    uudemon.poll(1M) — sets up polling for selected systems
    uusched(1M) — schedules uucp file transfers
network protocols
    getprotoent(3N) — get a protocol entry
    protocols(4N) — protocol name database
network, status
    rup(1N) — displays the status of machines on the local network (RPC
         version)
    ruptime(1N) — displays the host status of local machines
    rusers(1N) — produces a login list for local machines (RPC version)
    rwho(1N) — displays a list of the active users from all of the systems on
         the local network
    ether(3N) — monitors Ethernet traffic
    sm_inter(3N) — status monitor protocol
network testing
    ping(1M) — exercises the TCP/IP network by sending Internet Control
         Message Protocol (ICMP) packets to a named host
    10(5) — software loopback network interface
networks, general
    atstatus(1) — displays status information from an AppleTalk device
    checkinstall(1) — checks the installation of boards
    netstat(1N) — displays network status information
    ypcat(1) — lists the contents of a Network Information Service (NIS)
    ypmatch(1) — lists the value of a specified key in a Network Information
         Service (NIS) map
    yppasswd(1) — changes a login password on the Network Information
         Service (NIS) master server
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vpwhich(1) — displays the host name of a system's Network Information
    Service (NIS) server
appleping(1M) — exercises the AppleTalk network by sending packets
    to a named host
appletalk(1M) — enables you to configure and display AppleTalk
    network interfaces
ifconfig(1M) — manages network interfaces
lockd(1M) — handle local and remote lock requests
ping(1M) — exercises the TCP/IP network by sending Internet Control
    Message Protocol (ICMP) packets to a named host
route(1M) — manipulates the routing tables
routed(1M) — invokes the network routing daemon
rwall(1M) — writes to all users over a network
rwalld(1M) — invokes the network rwall server
slattach(1M) — attaches a serial line to a network interface
slattconf(1M) — attaches a serial line to a network interface and
    configures the network interface
slip(1M) — assigns a serial line to a network interface
statd(1M) — provide crash and recovery monitoring for network locking
vpinit(1M) — initializes Network Information Service (NIS) maps for
    master and slave servers
ypmake(1M) — rebuilds the Network Information Service (NIS) maps
yppasswdd(1M) — handle requests to change a password served by the
    Network Information Service (NIS)
yppol1(1M) — reports the version of a Network Information Service
    (NIS) map that is on an NIS server
yppush(1M) — propagates changed Network Information Service (NIS)
    maps
vpserv(1M) — provide Network Information Service (NIS) service
ypset(1M) — sets ypbind to a particular domain and Network
    Information Service (NIS) server
ypxfr(1M) — transfers a Network Information Service (NIS) map to the
    local system
connect(2N) — initiates a connection on a socket
socket(2N) — create an endpoint for communication
socketpair(2) — creates a pair of connected sockets
byteorder(3N) — convert values between host and network byte order
gethostbyaddr(3N) — get network host entry
getnetent(3N) — get network entry
rwall(3N) — writes to specified remote machines
ypclnt(3N) — provide a Network Information Service (NIS) client
    interface
vppasswd(3N) — updates a user password on the Network Information
```

```
Service (NIS) master server
    NETADDRS(4) — network address database
    appletalkrc(4) — obsolete AppleTalk network configuration file
    ypfiles(4) — the Network Information Service (NIS) database and
         directory structure
    10(5) — software loopback network interface
news
    news(1) — displays local news items
NFS
    automount(1M) — mounts Network File System (NFS) when needed
    export fs(1M) — exports and unexports directories to Network File
         System (NFS) clients
    mountd(1M) — invokes the Network File System (NFS) mount-request
    nfsd(1M) — invoke the NFS daemons
    nfsstat(1M) — displays Network File System (NFS) statistics
    fsmount(2) — mount a network file system (NFS)
    nfssvc(2) — provides NFS daemons
    exportent(3) — get exported file-system information
    exports(4) — directories to export to Network File System (NFS) clients
    fstab(4) — parameter file format
nodes
    uname(1) — displays identification information about the current system
    chgnod(1M) — changes the current A/UX system node name
    mknod(1M) — builds a device file
    rtmp(3N) — identify AppleTalk node and bridge addresses
    intro(7) — introduces device drivers and interfaces
notification (mail)
    biff(1) — enables and disables notification of mail by comsat
nroff
    checknr(1) — checks nroff/troff files
    colcrt(1) — filters nroff output for terminal previewing
    deroff(1) — removes nroff/troff, tbl, and eqn constructs
    diffmk(1) — marks the differences between two files
    mm(1) — formats documents that contain nroff and mm macro
        formatting requests
    negn(1) — formats mathematical text for nroff
    nroff(1) — text formatter
    soelim(1) — eliminates the source commands from nroff input
    tbl(1) — table formatter for nroff or troff
    egnchar(5) — special character definitions for egn and negn
    mptx(5) — the macro package for formatting a permuted index
    ms(5) — text formatting macros
    nterm(5) — terminal driving tables for nroff
```

```
null device
    null(7) — represents the null device file
numbers
    arithmetic(6) — provides arithmetic problems
    number(6) — converts Arabic numerals to English
numeric sian
    sign(3F) — returns Fortran transfer-of-sign intrinsic functions
NVE
    atlookup(1) — looks up network-visible entities (NVEs) registered on
         the AppleTalk network system
object file
    conv(1) — swaps bytes in COFF files
    dump(1) — stores (saves) selected parts of an object file
    1d(1) — invokes the link editor for common object files
    nm(1) — displays the symbol table of a common object file
    strings(1) — finds the printable strings in an object or other binary file
    cpset(1M) — installs files in specified directories
    ldclose(3X) — close a common object file
    1dfcn(3X) — provide common object file access routines
    1dfhread(3X) — read the file header of a common object file
    ldgetname(3X) — retrieves symbol name for object file symbol table
         entry
    ldlread(3X) — manipulate line number entries of a common object file
         function
    1dlseek(3X) — seek to line number entries of a section of a common
         object file
    1dohseek(3X) — seek to the optional file header of a common object file
    1dopen(3X) — open a common object file for reading
    1drseek(3X) — seek to relocation entries of a section of a common
         object file
    ldshread(3X) — read an indexed/named section header of a common
         object file
    ldsseek(3X) — seek to an indexed/named section of a common object
    ldtbindex(3X) — compute index of a symbol table entry of a common
         object file
    ldtbread(3X) — read an indexed symbol table entry of a common
         object file
    1dtbseek(3X) — seek to the symbol table of a common object file
    nlist(3C) — gets entries from name list
    a.out(4) — common assembler and link editor output
    aouthdr(4) — a. out header for common object files
    filehdr(4) — file header for common object files
    linenum(4) — line number entries in a common object file
```

```
reloc(4) — relocation information for a common object file
    scnhdr(4) — section header for a common object file
    syms(4) — common object file symbol table format
octal
    od(1) — converts binary data to a displayable form in octal, decimal,
         hexadecimal, or ASCII
online documentation
    apropos(1) — locates commands by keyword
    man(1) — displays the named manual page entries
    what is(1) — reports a brief description for the manual page entry
         specified
    whereis(1) — reports the locations of the source, binary, and online help
         files for a specified command
    man(5) — macros for formatting entries in this manual
optimization
    cc(1) — invokes the C compiler
    prof(1) — displays profile data
    dcopy(1M) — copies System V File System-style file systems for optimal
         access time
    kconfig(1M) — tunes kernel parameters for work-load optimization
    sadc(1M) — report system activity
    tunefs(1M) — tunes a Berkeley 4.2 (UFS) file system
    profil(2) — reports the execution time of an application
    curses 5.0(3X) — provides BSD-style screen functions with optimal
         cursor motion
    curses(3X) — CRT screen handling and optimization package
overviews
    intro(1) — introduces the command and application programs
    rcsintro(1) — introduces RCS commands
    acct(1M) — present an overview of accounting commands
    intro(1M) — introduces system maintenance commands
    intro(2) — introduces system calls and error numbers
    intro(3) — introduces the subroutines and libraries
    intro(4) — introduction to file formats
    intro(5) — introduction to miscellaneous facilities
    intro(6) — introduction to games
    intro(7) — introduces device drivers and interfaces
    intro(8) — introduces commands executed from the A/UX Startup shell
ownership, file
    chown(1) — change the owner or group of a file
    ls(1) — lists the contents of a directory
    chown(2) — changes the owner and group of a file
```

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packets
     spray(1M) — sprays packets
     sprayd(1M) — returns information for the spray command
     spray(3N) — scatters data in order to check the network
pagination
     4014(1) — filters text containing printer control sequences a page at a
     daps(1) — invokes the Autologic APS-5 phototypesetter troff post-
         processor
     enscript(1) — converts text files to format for printing
    mm(1) — formats documents that contain nroff and mm macro
         formatting requests
    mmt(1) — typeset documents that contain troff and mm or mv macro-
         formatting requests
    mvt(1) — typeset documents that contain troff and mm or my macro-
         formatting requests
    nroff(1) — text formatter
    otroff(1) — formats text for a specific phototypesetter
    pr(1) — formats text for a print device
    psdit(1) — converts troff intermediate format to PostScript format
    psroff(1) — formats a file through troff so it can be printed on a
         POSTSCRIPT printer
    roffbib(1) — prints out all records in a bibliographic database
    troff(1) — formats and typesets files
PAP
    atprint(1) — transfers data to a printer by using AppleTalk protocols
    atstatus(1) — displays status information from an AppleTalk device
    pap(3N) — provide AppleTalk Printer Access Protocol (PAP) interface
parser
    awk(1) — scans a file for lines that match a specific pattern
    getopt(1) — parses command options
    lex(1) — generates programs for simple lexical tasks
    yacc(1) — compiles compilers (yet another compiler-compiler)
partitions
    dd(1) — converts and copies a file
    dp(1M) — performs disk partitioning
    pname(1M) — associates named partitions with device files
    getptabent(3) — get partition table file entry
    bzb(4) — Block Zero Block file format
    dpme(4) — format of disk partition map entries
    ptab(4) — partition table file
```

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password file
    finger(1) — displays information about the users on a system
    pwck(1M) — check the password/group files
    vipw(1M) — edits the password file
    vppasswdd(1M) — handle requests to change a password served by the
         Network Information Service (NIS)
    getpwent(3C) — get the password file entry
    putpwent(3C) — write password file entry
    passwd(4) — password file
passwords
    crypt(1) — encodes and decodes passwords
    passwd(1) — changes the login password
    vppasswd(1) — changes a login password on the Network Information
         Service (NIS) master server
    getpass(3C) — read a password
    getpwent(3C) — get the password file entry
    putpwent(3C) — write password file entry
    yppasswd(3N) — updates a user password on the Network Information
         Service (NIS) master server
    auxstartuprc(4) — authorization file that helps password-protect and
         otherwise secure A/UX Startup
path string functions
    basename(1) — get part of a pathname
    realpath(3) — returns the real filename of a file
pathnames
    basename(1) — get part of a pathname
    whereis(1) — reports the locations of the source, binary, and online help
         files for a specified command
    pathconf(3P) — get configurable pathname variables
    realpath(3) — returns the real filename of a file
patterns
    awk(1) — scans a file for lines that match a specific pattern
    grep(1) — search a file for a specific pattern
    regexp(5) — regular expression compile and match routines
pause
    sh1(1) — manages the layering of multiple shells
    sleep(1) — suspends the system for a specified interval of time
    signals and wait for interrupt
    wait3(2N) — wait for child process to stop or terminate
    wait(2) — wait for child process to stop or terminate
    sigsuspend(3P) — waits for a signal
    sleep(3C) — suspends execution for interval
    tcdrain(3P) — provide line control functions
    usleep(3) — suspend execution for interval
```

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PDP-11 computer
    swab(3C) — swaps bytes
peer
    getpeername(2N) — gets the name of a connected peer
performance
    cc(1) — invokes the C compiler
    nice(1) — executes a command at low priority
    prof(1) — displays profile data
    timex(1) — reports the elapsed, user, and system time during the
         execution of a command
    kconfig(1M) — tunes kernel parameters for work-load optimization
    profil(2) — reports the execution time of an application
    monitor(3C) — prepares an execution profile
peripheral device files
    tty(1) — obtains the device filename for the terminal or CommandShell
         window where it is invoked
    dev_kill(1M) — removes device files from a directory
    devnm(1M) — displays the current device name
    mknod(1M) — builds a device file
    pname(1M) — associates named partitions with device files
    tty(7) — controls the terminal interface
permissions
    chmod(1) — changes the permissions of a file
    chown(1) — change the owner or group of a file
    chmod(2) — change mode of file
    umask(2) — set and get file creation mask
permuted index
    mptx(5) — the macro package for formatting a permuted index
рi
    math(5) — math functions and constants
pipe
    tee(1) — transcribes data
    pipe(2) — creates an interprocess channel
    popen(3S) — initiate pipe to/from a process
plotters
    pac(1M) — gathers printer/plotter accounting information
plotting
    graph(1G) — draws a graph
    spline(1G) — interpolates a smooth curve
    tplot(1G) — interprets plotter instructions for use at a vintage display
         device
    plot(3X) — provide graphics interface subroutines
    plot(4) — graphics interface
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portability
    ar(1) — maintains a library of files in an archive
    lint(1) — invokes a C program checker
    pax(1) — copies files to or from an archive in an IEEE format
ports
    ct(1C) — runs login on a dial-up line
    cu(1C) — establishes an interactive connection with another system
    kermit(1C) — invokes the Kermit file-transfer program
    stty(1) — sets the modes for a terminal
     tip(1C) — establishes a connection to a remote system
    tty(1) — obtains the device filename for the terminal or CommandShell
         window where it is invoked
    updater(1) — updates files between two machines
    getty(1M) — set the initial communication modes, such as speed and
         line discipline, for the purpose of logging users in to A/UX through
         serial lines
    setport(1M) — sets the characteristics of a serial port
    slattach(1M) — attaches a serial line to a network interface
    slattconf(1M) — attaches a serial line to a network interface and
         configures the network interface
    slip(1M) — assigns a serial line to a network interface
    gettydefs(4) — speed and terminal settings used by getty
    inittab(4) — script for the init process
    ttytype(4) — database of terminal types by port
    serial(7) — provides the on-board serial ports
POSIX compatibility
    setposix(3P) — sets POSIX compatibility flags
poster-size text
    banner 7(1) — generates a large banner
    banner(1) — generates a poster
posters, printing text for
    banner 7(1) — generates a large banner
    banner(1) — generates a poster
PostScript®
    enscript(1) — converts text files to format for printing
    psdit(1) — converts troff intermediate format to POSTSCRIPT format
    psroff(1) — formats a file through troff so it can be printed on a
         POSTSCRIPT printer
    transcript(1M) — filter data for the POSTSCRIPT printers
    afm(4) — Adobe PostScript font metrics file format
    postscript(4) — PostSCRIPT print file format
```

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power
    powerdown(1M) — turns off power to the computer
preferences, Macintosh
    changes ize(1) — changes or displays the fields of the 'SIZE' resource
         of a file
    mactoiso(1) — convert between Macintosh encoding and International
         Standards Organization (ISO) encoding
    systemfolder(1) — create a personal System Folder
    keyset(1M) — sets the keyboard for the console
preprocessors, text
    awk(1) — scans a file for lines that match a specific pattern
    col(1) — filters text containing printer control sequences for use at a
         display device
    comm(1) — selects or rejects lines common to two sorted files
    cpp(1) — invokes the C language preprocessor
    cw(1) — prepare constant-width text for otroff
    daps(1) — invokes the Autologic APS-5 phototypesetter troff post-
         processor
    deroff(1) — removes nroff/troff, tbl. and equipments
    egn(1) — format mathematical text for troff
    expand(1) — expand tabs to spaces, and vice versa
    fmt(1) — invokes a simple text formatter
    fold(1) — folds long lines for finite-width output device
    grap(1) — invokes a pic preprocessor for drawing graphs
    iw2(1) — prepares data to be printed on the Apple ImageWriter II printer
    m4(1) — processes macros for C and other languages
    negn(1) — formats mathematical text for nroff
    pic(1) — preprocesses troff files that contain drawings
    pr(1) — formats text for a print device
    rev(1) — reverses characters within each line of text
    soelim(1) — eliminates the source commands from nroff input
    sort(1) — sorts or merges files
    ssp(1) — produces single spaced output
    tabs(1) — sets the tab stops on a terminal
    tbl(1) — table formatter for nroff or troff
    uniq(1) — reports repeated lines in a file
pretty printing
    cb(1) — improves spacing and indentation of C source files
    indent(1) — indents and formats C program source
Print Access Protocol
    atprint(1) — transfers data to a printer by using AppleTalk protocols
    atstatus(1) — displays status information from an AppleTalk device
    pap(3N) — provide AppleTalk Printer Access Protocol (PAP) interface
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print spooler maintenance
     enable(1) — enable or disable LP printers
     lpstat(1) — prints lp status information
     accept(1M) — allows 1p requests
     lpadmin(1M) — configures the lp spooling system
     1pc(1M) — controls the operation of the line printer
     1pd(1M) — supports the Berkeley print spooler." 4.2 line-printer daemon
     lpsched(1M) — start or stop the lp request scheduler and move requests
     lptest(1M) — generates a line-printer ripple pattern
     reject(1M) — prevents LP requests
     transcript(1M) — filter data for the POSTSCRIPT printers
printer testing
     lptest(1M) — generates a line-printer ripple pattern
printers, general
     asa(1) — interprets ASA carriage control characters
     at_cho_prn(1) — allows you to choose a default printer on the
         AppleTalk internet
     cancel(1) — cancels print requests spooled through the 1p command
     enable(1) — enable or disable LP printers
     1p(1) — spools print requests to printers
     lpq(1) — queries the print spooler for progress information
     lpr(1) — spools print requests to printers
     1prm(1) — removes jobs from the line printer spooling queue for a
         Berkeley file system (4.2)
     lpstat(1) — prints lp status information
     accept(1M) — allows 1p requests
     lpadmin(1M) — configures the lp spooling system
     lpc(1M) — controls the operation of the line printer
     1pd(1M) — supports the Berkeley print spooler." 4.2 line-printer daemon
     lpsched(1M) — start or stop the lp request scheduler and move requests
     lptest(1M) — generates a line-printer ripple pattern
    pac(1M) — gathers printer/plotter accounting information
     reject(1M) — prevents LP requests
printing, Appletalk
     at_cho_prn(1) — allows you to choose a default printer on the
         AppleTalk internet
     atlookup(1) — looks up network-visible entities (NVEs) registered on
         the AppleTalk network system
     atprint(1) — transfers data to a printer by using AppleTalk protocols
    atstatus(1) — displays status information from an AppleTalk device
printing files
    cancel(1) — cancels print requests spooled through the 1p command
     1p(1) — spools print requests to printers
     1pq(1) — queries the print spooler for progress information
```

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1pr(1) — spools print requests to printers
    1prm(1) — removes jobs from the line printer spooling queue for a
         Berkeley file system (4.2)
printing, poster-size text
    banner7(1) — generates a large banner
    banner(1) — generates a poster
priority (process)
    nice(1) — executes a command at low priority
    nice(2) — changes the priority of a process
process accounting
    lav(1) — displays load average statistics
    acctcms(1M) — summarizes commands from per-process accounting
         records
    acctcom(1M) — searches and formats process accounting files
    acctprc(1M) — provide process accounting
    acct(2) — enable or disable process accounting
    times(2) — get process and child process times
    acct(4) — per-process accounting file format
    prof(5) — profile within a function
process groups
    getpid(2) — get process, process group, or parent process IDs
    killpg(3N) — sends signal to a process group
    tcgetpgrp(3P) — gets distinguished process group ID
    tcsetpgrp(3P) — sets distinguished process group ID
process IDs
    ps(1) — reports process status
    getpid(2) — get process, process group, or parent process IDs
process limits
    kconfig(1M) — tunes kernel parameters for work-load optimization
    ulimit(2) — get and set user limits
process priority
    nice(1) — executes a command at low priority
    nice(2) — changes the priority of a process
process scheduling
    at(1) — run commands at a later time
    crontab(1) — aids in the use of the cron process scheduling program
    nice(1) — executes a command at low priority
    cron(1M) — runs the clock daemon
    alarm(2) — sets a process's alarm clock
process termination
    kill(1) — terminates a process
    nohup(1) — runs a command so that it can continue to run even after your
         session has ended
    killall(1M) — kills all active processes
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shutdown(1M) — terminates processes that support multi-user mode and
         enters single-user mode
    exit(2) — terminate process
    abort(3C) — generates an IOT fault
     abort(3F) — terminates a Fortran program
processes, general
    kill(1) — terminates a process
    ps(1) — reports process status
     fuser(1M) — identifies processes using a file or file structure
     init(1M) — spawn general processes
    killall(1M) — kills all active processes
    lockd(1M) — handle local and remote lock requests
     exit(2) — terminate process
     fork(2) — creates a new process
    getpid(2) — get process, process group, or parent process IDs
    kill(2) — sends a signal to a process or a group of processes
    nice(2) — changes the priority of a process
    pause(2) — suspends a process until signal
    phys(2) — allows a process to access physical addresses
    pipe(2) — creates an interprocess channel
    plock(2) — enables a lock process for text or data in memory
    ptrace(2) - process trace
    set compat(2) — set or get process compatibility mode
    wait 3(2N) — wait for child process to stop or terminate
    wait(2) — wait for child process to stop or terminate
    killpg(3N) — sends signal to a process group
    popen(3S) — initiate pipe to/from a process
processes, monitoring
    time(1) — prints the elapsed time during the execution of a command
    timex(1) — reports the elapsed, user, and system time during the
         execution of a command
processes, signaling
    ipcrm(1) — removes interprocess communications facilities
    kill(1) — terminates a process
processing unit
    machid(1) — provide truth values about processor type
    values(5) — machine-dependent values
processors, text
    awk(1) — scans a file for lines that match a specific pattern
    col(1) — filters text containing printer control sequences for use at a
         display device
    comm(1) — selects or rejects lines common to two sorted files
    cpp(1) — invokes the C language preprocessor
    daps(1) — invokes the Autologic APS-5 phototypesetter troff post-
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```
processor
    deroff(1) — removes nroff/troff, tbl, and egn constructs
    eqn(1) — format mathematical text for troff
    expand(1) — expand tabs to spaces, and vice versa
    fmt(1) — invokes a simple text formatter
    fold(1) — folds long lines for finite-width output device
    grap(1) — invokes a pic preprocessor for drawing graphs
    iw2(1) — prepares data to be printed on the Apple ImageWriter II printer
    m4(1) — processes macros for C and other languages
    negn(1) — formats mathematical text for nroff
    pic(1) — preprocesses troff files that contain drawings
    pr(1) — formats text for a print device
    rev(1) — reverses characters within each line of text
    sort(1) — sorts or merges files
    ssp(1) — produces single spaced output
    tabs(1) — sets the tab stops on a terminal
    tbl(1) — table formatter for nroff or troff
    unig(1) — reports repeated lines in a file
program debugging
    adb(1) — debugs executable programs
    ctrace(1) — debugs a C program
    dbx(1) — debugs and executes programs
    sdb(1) — symbolic debugger
program source
    admin(1) — creates and administers SCCS files
    cb(1) — improves spacing and indentation of C source files
    cdc(1) — changes the delta commentary of an SCCS delta
    ci(1) — checks in RCS revisions
    co(1) — checks out RCS revisions
    comb(1) — combines SCCS deltas
    get(1) — gets a version of an SCCS file
    help(1) — provides help information about SCCS commands and
         messages
    ident(1) — displays RCS keywords and their values
    indent(1) — indents and formats C program source
    lint(1) — invokes a C program checker
    make(1) — maintains, updates, and regenerates groups of files
    prs(1) — displays information about an SCCS file
    rcs(1) — creates new RCS files or changes attributes of existing RCS files
    rcsdiff(1) — compares RCS revisions
    rcsintro(1) — introduces RCS commands
    rcsmerge(1) — merges two versions of an RCS file
    rlog(1) — displays log messages and other information about RCS files
    rmdel(1) — removes a delta from an SCCS file
```

```
sact(1) — displays who has checked a Source Code Control System
         (SCCS) file out for editing
    SCCS(1) — performs SCCS subsystem commands
    sccsdiff(1) — compares two versions of an SCCS file
    ucbdiff3(1) — reports the differences between three files
    ucbdiff(1) — reports differences between two files or directories
    unget(1) — undoes a previous get of an SCCS file
    val(1) — validate SCCS file
    what(1) — reports identification information for a file
    sccstorcs(1M) — builds an RCS file from an SCCS file
    rcsfile(4) — format of an RCS file
    sccsfile(4) — format of an SCCS file
programming, general development tools
    adb(1) — debugs executable programs
    admin(1) — creates and administers SCCS files
    ar(1) — maintains a library of files in an archive
    as(1) — assembles files by translating assembler mnemonics to object
         code
    bs(1) — compiles and interprets bs programs
    cdc(1) — changes the delta commentary of an SCCS delta
    ci(1) — checks in RCS revisions
    co(1) — checks out RCS revisions
    comb(1) — combines SCCS deltas
    conv(1) — swaps bytes in COFF files
    dbx(1) — debugs and executes programs
    delta(1) — makes a delta (change) to an SCCS file
    dis(1) — produces an assembly language listing for a specified file
    dump(1) — stores (saves) selected parts of an object file
    get(1) — gets a version of an SCCS file
    help(1) — provides help information about SCCS commands and
         messages
    hex(1) — converts an object file to Motorola S-record format
    1d(1) — invokes the link editor for common object files
    lex(1) — generates programs for simple lexical tasks
    lorder(1) — finds the ordering relation for an object library
    make(1) — maintains, updates, and regenerates groups of files
    mkshlib(1) — creates a shared library
    nm(1) — displays the symbol table of a common object file
    od(1) — converts binary data to a displayable form in octal, decimal,
         hexadecimal, or ASCII
    prof(1) — displays profile data
    prs(1) — displays information about an SCCS file
    rcs(1) — creates new RCS files or changes attributes of existing RCS files
    rcsdiff(1) — compares RCS revisions
```

```
rcsintro(1) — introduces RCS commands
    rcsmerge(1) — merges two versions of an RCS file
    rcvhex(1) — receives and converts Motorola S-records from a port to a
         file
    regcmp(1) — compiles regular expressions with a file
    rlog(1) — displays log messages and other information about RCS files
    rmdel(1) — removes a delta from an SCCS file
    rpcgen(1) — generates C source code from a remote procedure call
         (RPC) source file
    sact(1) — displays who has checked a Source Code Control System
         (SCCS) file out for editing
    SCCS(1) — performs SCCS subsystem commands
    sccsdiff(1) — compares two versions of an SCCS file
    sdb(1) — symbolic debugger
    size(1) — displays section sizes of common object files
    strings(1) — finds the printable strings in an object or other binary file
    strip(1) — strips symbol and line number information from an object file
    tsort(1) — sorts lines in a file topologically
    unget(1) — undoes a previous get of an SCCS file
    val(1) — validate SCCS file
    vc(1) — manipulates version control information inside a data stream
    what (1) — reports identification information for a file
    vacc(1) — compiles compilers (yet another compiler-compiler)
    sccstorcs(1M) — builds an RCS file from an SCCS file
programming, Macintosh development tools
    derez(1) — decompiles a resource file
    rez(1) — compiles Macintosh resource files from source code
programming, shell
    basename(1) — get part of a pathname
    echo(1) — echoes its arguments
    expr(1) — evaluates arguments as an expression
    getopt(1) — parses command options
    line(1) — reads one line from the standard input
    query(1) — queries the user for input
    rev(1) — reverses characters within each line of text
    test(1) — evaluates conditions
    tput(1) — queries terminfo database
    true(1) — provides truth values
    macquery(1M) — posts a Macintosh alert box to query the user
programming, using C
    cb(1) — improves spacing and indentation of C source files
    cc(1) — invokes the C compiler
    cflow(1) — generates a C flowgraph
    cpp(1) — invokes the C language preprocessor
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ctags(1) — maintains a tags file for a C program
     ctrace(1) — debugs a C program
     cxref(1) — generates a C program cross-reference
     ident(1) — displays RCS keywords and their values
     indent(1) — indents and formats C program source
     lint(1) — invokes a C program checker
     mkstr(1) — creates an error message file by massaging C source
         programs
     xstr(1) — reports strings from C programs to implement shared strings
programming, using Fortran
     asa(1) — interprets ASA carriage control characters
     ef1(1) — invokes the Extended Fortran Language
     f77(1) — invokes the Fortran 77 compiler
     fpr(1) — filters the output of Fortran programs for line printing
     fsplit(1) — splits f77 or ef1 files
programs, delaying running of
     sleep(1) — suspends the system for a specified interval of time
programs, establishing times for running
     at(1) — run commands at a later time
     crontab(1) — aids in the use of the cron process scheduling program
     cron(1M) — runs the clock daemon
programs, installation utilities
    cpset(1M) — installs files in specified directories
     finstall(1M) — installs A/UX software from specially prepared floppy
    install(1M) — places files in specified directories
programs, run-time enviroment settings
    env(1) — sets the environment for command execution
    nice(1) — executes a command at low priority
    nohup(1) — runs a command so that it can continue to run even after your
         session has ended
    sh1(1) — manages the layering of multiple shells
    yes(1) — generates y entries in response to requests for input
    chroot(1M) — changes the root directory for a command
programs, running Macintosh applications
    launch(1) — runs a Macintosh binary application in A/UX
progress bar
    StartMonitor(1M) — displays a progress bar during the A/UX boot
         sequence
queues
    1pq(1) — queries the print spooler for progress information
    mailg(1M) — lists the contents of the mail queue
    msgct1(2) — message control operations
    msgget(2) — gets message queue
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msgop(2) — message operations
    insque(3N) — insert/remove element from a queue
auiz
    quiz(6) — gives associative knowledge tests on various subjects
rain
    rain(6) — animates raindrops
random numbers
    drand48(3C) — generate uniformly distributed pseudo-random numbers
    rand(3C) — call a simple random-number generator
    rand(3F) — provide a Fortran uniform random-number generator
random text generation
    fortune(6) — plays the game of fortune telling
RCS
    ci(1) — checks in RCS revisions
    co(1) — checks out RCS revisions
    ident(1) — displays RCS keywords and their values
    merge(1) — merges three files into one
    rcs(1) — creates new RCS files or changes attributes of existing RCS files
    rcsdiff(1) — compares RCS revisions
    rcsintro(1) — introduces RCS commands
    rcsmerge(1) — merges two versions of an RCS file
    rloq(1) — displays log messages and other information about RCS files
    ucbdiff3(1) — reports the differences between three files
    ucbdiff(1) — reports differences between two files or directories
    sccstorcs(1M) — builds an RCS file from an SCCS file
    rcsfile(4) — format of an RCS file
reading files
    cat(1) — catenates and displays the contents of files
    head(1) — displays the first few lines of a file
    line(1) — reads one line from the standard input
    more(1) — show the contents of a file in display-size chunks
    pg(1) — shows the contents of a file in display-size chunks
    soelim(1) — eliminates the source commands from nroff input
    tail(1) — displays the last part of a file
    read(2) — reads from a file
    fread(3S) — produce binary input/output
    getc(3S) — get character or word from a stream
real group IDs
    getuid(2) — get real and effective user IDs and group IDs
    setregid(2) — sets real and effective group ID
real numbers
    aint(3F) — Fortran integer part intrinsic function
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real user IDs
     getuid(2) — get real and effective user IDs and group IDs
     setreuid(2) — set real and effective user ID
     setsid(2P) — create session and set process group ID
records, processing
     colrm(1) — removes columns from a file
     comm(1) — selects or rejects lines common to two sorted files
     cut(1) — cuts out selected fields of each line of a file
     ioin(1) — combines (joins) two relational files
    paste(1) — merges lines of several files or subsequent lines of one file
     sort(1) — sorts or merges files
    uniq(1) — reports repeated lines in a file
redirection of output or input
     cat(1) — catenates and displays the contents of files
     csh(1) — runs the C shell, a command interpreter with C-like syntax
     ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
     sh(1) — runs the Bourne shell
     tee(1) — transcribes data
regular expressions
     grep(1) — search a file for a specific pattern
     regcmp(1) — compiles regular expressions with a file
    regcmp(3X) — compile and execute a regular expression
     regexp(5) — regular expression compile and match routines
relational joining of files
     join(1) — combines (joins) two relational files
relocation
    reloc(4) — relocation information for a common object file
remainders
     floor(3M) — floor, ceiling, remainder, absolute value functions
    mod(3F) — provide Fortran remaindering intrinsic functions
reminder service
    calendar(1) — provides a reminder service
     leave(1) — reminds you when you have to leave
Remote Procedure Call
    rup(1N) — displays the status of machines on the local network (RPC
         version)
    rusers(1N) — produces a login list for local machines (RPC version)
    nfsstat(1M) — displays Network File System (NFS) statistics
    portmap(1M) — converts RPC program numbers into DARPA protocol
         port numbers
    rpcinfo(1M) — reports RPC information
    rusersd(1M) — rusers invokes a server for users
    spray(1M) — sprays packets
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sprayd(1M) — returns information for the spray command
    getrpcent(3N) - get RPC entry
    getrpcport(3N) — gets a Remote Procedure Call (RPC) port number
    rpc(3N) — library routines for remote procedure calls
    spray(3N) — scatters data in order to check the network
    rpc(4) — RPC program number database
remote systems
    atprint(1) — transfers data to a printer by using AppleTalk protocols
    ct(1C) — runs login on a dial-up line
    cu(1C) — establishes an interactive connection with another system
    rcp(1C) — copies files between two systems
    rdist(1) — distributes remote files
    remsh(1N) — invokes to a shell on a remote system
    rlogin(1N) — logs in to a remote system
    rup(1N) — displays the status of machines on the local network (RPC
         version)
    rusers(1N) — produces a login list for local machines (RPC version)
    tip(1C) — establishes a connection to a remote system
    uucp(1C) — copies files from one system to another system
    uuname(1C) — displays the names of systems to which uucp and cu can
         connect
    uusend(1C) — sends a file to a remote host
    remlogin(1M) — runs on a remote system to log you in
    remshd(1M) — invokes the remote shell server
    restore(1M) — retrieve files from within a dump.bsd archive into an
         existing file system
    rexecd(1M) — server for remote executions
    rlogind(1M) — server for remote logins
    rusersd(1M) — rusers invokes a server for users
    showmount(1M) — shows all remote mounts
    talkd(1M) — invokes the remote user communication server
    uuxqt(1M) — handles requests from remote systems to run commands
    mount(3N) — keeps track of remotely mounted file systems
    rcmd(3N) — routines for returning a stream to a remote command
    rexec(3N) — returns a stream to a remote command
    rnusers(3N) — return information about users on remote machines
    rpc(3N) — library routines for remote procedure calls
    rstat(3N) — get performance data from remote kernel
    rtime(3) — gets remote time
    rwall(3N) — writes to specified remote machines
    sm inter(3N) — status monitor protocol
    xdr(3N) — provide library routines for external data representation
    phones(4) — remote host telephone number database
    remote(4) — remote host description file
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rhosts(4N) — trusted hosts file format
    rmtab(4) — remotely mounted file system table
removina
    cancel(1) — cancels print requests spooled through the 1p command
    colrm(1) — removes columns from a file
    cut(1) — cuts out selected fields of each line of a file
    deroff(1) — removes nroff/troff, tbl, and eqn constructs
    ipcrm(1) — removes interprocess communications facilities
    kill(1) — terminates a process
    1prm(1) — removes jobs from the line printer spooling queue for a
         Berkeley file system (4.2)
    rm(1) — remove files or directories
    rmdel(1) — removes a delta from an SCCS file
    dev_kill(1M) — removes device files from a directory
    killall(1M) — kills all active processes
    flock(2) — applies or removes an advisory lock on an open file
    rmdir(2) — remove a directory file
    unlink(2) — remove directory entry
    unmount(2) — remove a file system
    insque(3N) — insert/remove element from a queue
repairing file systems
    clri(1M) — clears inodes
    fsck(1M) — checks file-system consistency and interactively repairs the
         file system
    fsdb(1M) — debugs the file system
    ncheck(1M) — locates the filename associated with an i-number
    esch(8) — validates and repairs file systems from the A/UX Startup shell
repeated lines in text
    uniq(1) — reports repeated lines in a file
resources, Macintosh
    derez(1) — decompiles a resource file
    fcnvt(1) — converts a file in one storage format to a different storage
         format
    rez(1) — compiles Macintosh resource files from source code
    setfile(1) — sets attributes for Macintosh files, such as file type and
         creator
reversing characters within lines
    rev(1) — reverses characters within each line of text
Revision Control System
    ci(1) — checks in RCS revisions
    co(1) — checks out RCS revisions
    ident(1) — displays RCS keywords and their values
    merge(1) — merges three files into one
    rcs(1) — creates new RCS files or changes attributes of existing RCS files
```

```
rcsdiff(1) — compares RCS revisions
    rcsintro(1) — introduces RCS commands
    rcsmerge(1) — merges two versions of an RCS file
    rlog(1) — displays log messages and other information about RCS files
    ucbdiff3(1) — reports the differences between three files
    ucbdiff(1) — reports differences between two files or directories
    sccstorcs(1M) — builds an RCS file from an SCCS file
    rcsfile(4) — format of an RCS file
robots
    autorobots(6) — plays the game of autorobots
    chase(6) — plays the game of chase
    robots(6) — plays the game of robots
root directory
    chroot(1M) — changes the root directory for a command
    chroot(2) — changes the root directory
rounding
    round(3F) — provide Fortran nearest integer functions
routing tables
    route(1M) — manipulates the routing tables
    routed(1M) — invokes the network routing daemon
RPC
    rup(1N) — displays the status of machines on the local network (RPC
         version)
    rusers(1N) — produces a login list for local machines (RPC version)
    nfsstat(1M) — displays Network File System (NFS) statistics
    portmap(1M) — converts RPC program numbers into DARPA protocol
         port numbers
    rpcinfo(1M) — reports RPC information
    rusersd(1M) — rusers invokes a server for users
    spray(1M) — sprays packets
    sprayd(1M) — returns information for the spray command
    getrpcent(3N) — get RPC entry
    getrpcport(3N) — gets a Remote Procedure Call (RPC) port number
    rpc(3N) — library routines for remote procedure calls
    spray(3N) — scatters data in order to check the network
    rpc(4) — RPC program number database
run queue
    lav(1) — displays load average statistics
running Macintosh applications from the command line
    launch(1) — runs a Macintosh binary application in A/UX
SC40 Tape Backup
    tcb(1) — blocks data to 8K for direct input to /dev/rmt/tcx
    tc(7) — tape device driver
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SCCS
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admin(1) — creates and administers SCCS files
    cdc(1) — changes the delta commentary of an SCCS delta
    comb(1) — combines SCCS deltas
    delta(1) — makes a delta (change) to an SCCS file
    get(1) — gets a version of an SCCS file
    help(1) — provides help information about SCCS commands and
         messages
    prs(1) — displays information about an SCCS file
    rmdel(1) — removes a delta from an SCCS file
    sact(1) — displays who has checked a Source Code Control System
         (SCCS) file out for editing
    SCCS(1) — performs SCCS subsystem commands
    sccsdiff(1) — compares two versions of an SCCS file
    unget(1) — undoes a previous get of an SCCS file
    val(1) — validate SCCS file
    vc(1) — manipulates version control information inside a data stream
    what(1) — reports identification information for a file
    sccstorcs(1M) — builds an RCS file from an SCCS file
    sccsfile(4) — format of an SCCS file
SCCS deltas
    cdc(1) — changes the delta commentary of an SCCS delta
    comb(1) — combines SCCS deltas
    delta(1) — makes a delta (change) to an SCCS file
    rmdel(1) — removes a delta from an SCCS file
    sact(1) — displays who has checked a Source Code Control System
         (SCCS) file out for editing
screen management
    clear(1) — clears the terminal screen
    col(1) — filters text containing printer control sequences for use at a
         display device
    colort(1) — filters nroff output for terminal previewing
    u1(1) — filters special underlining sequences imbedded in text for use at a
         display device
    curses 5.0(3X) — provides BSD-style screen functions with optimal
         cursor motion
    curses(3X) — CRT screen handling and optimization package
screen processing
    300(1) — filter text containing printer control sequences for a DASI
    4014(1) — filters text containing printer control sequences a page at a
    450(1) — filters text containing printer control sequences for the DASI
         terminal
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tc(1) — interprets troff output for use at a vintage display device
searching
    grep(1) — search a file for a specific pattern
    bsearch(3C) — performs a binary search on a sorted table
    hsearch(3C) — manage hash search tables
    1search(3C) — provide a linear search and update
    tsearch(3C) — manage binary search trees
searching text
    freq(1) — reports character frequencies in a file
    grep(1) — search a file for a specific pattern
    lookbib(1) — finds references in a bibliography
    wc(1) — counts characters, words, and lines in a file
security
    login(1) — signs you on a terminal session
    logname(1) — gets the login name
    newgrp(1) — logs you into a new group
    passwd(1) — changes the login password
    rlogin(1N) — logs in to a remote system
    Login(1M) — logs you in to A/UX by using a graphical user interface
    remlogin(1M) — runs on a remote system to log you in
    rlogind(1M) — server for remote logins
    getlogin(3C) — gets login name
    logname(3X) — return login name of user
    auxstartuprc(4) — authorization file that helps password-protect and
         otherwise secure A/UX Startup
    issue(4) — project identification file format
    passwd(4) — password file
    profile(4) — setting up an environment at login time
segments
    brk(2) — change data segment space allocation
    end(3C) — last locations in program
    a.out(4) — common assembler and link editor output
semaphores
    ipcrm(1) — removes interprocess communications facilities
    ipcs(1) — reports interprocess communication facilities status
    semct1(2) — semaphore control operations
    semget(2) — get set of semaphores
    semop(2) — performs semaphore operations
serial communications
    ct(1C) — runs login on a dial-up line
    cu(1C) — establishes an interactive connection with another system
    kermit(1C) — invokes the Kermit file-transfer program
    stty(1) — sets the modes for a terminal
    tip(1C) — establishes a connection to a remote system
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tty(1) — obtains the device filename for the terminal or CommandShell
         window where it is invoked
    updater(1) — updates files between two machines
    uucp(1C) — copies files from one system to another system
    uuencode(1C) — encode and decode a binary file
    uusend(1C) — sends a file to a remote host
    uustat(1C) — controls uucp jobs and provides status information
    uuto(1C) — provide an easy interface to the uucp command, using the
         public directories
    uux(1C) — runs a command on a remote system
    getty(1M) — set the initial communication modes, such as speed and
         line discipline, for the purpose of logging users in to A/UX through
         serial lines
    setport(1M) — sets the characteristics of a serial port
    slattach(1M) — attaches a serial line to a network interface
    slattconf(1M) — attaches a serial line to a network interface and
         configures the network interface
    slip(1M) — assigns a serial line to a network interface
    gettydefs(4) — speed and terminal settings used by getty
    inittab(4) — script for the init process
    ttytype(4) — database of terminal types by port
    serial(7) — provides the on-board serial ports
Serial Line Internet Protocol
    dslipuser(1M) — displays the current state of the Compressed Serial
         Line/Internet Protocol (CSL/IP) database
    mkslipuser(1M) — creates or updates the Compressed Serial
         Line/Internet Protocol (CSL/IP) database
    slip(1M) — assigns a serial line to a network interface
    slip.config(4) — establishes the number of available Compressed
         Serial Line/Internet Protocol (CSL/IP) connections
    slip.hosts(4) — maps login names to Compressed Serial Line/Internet
         Protocl (CSL/IP) client host names
    slip.user(4) — database of available Compressed Serial Line/Internet
         Protocol (CSL/IP) connections
servers
    ypwhich(1) — displays the host name of a system's Network Information
         Service (NIS) server
    comsat(1M) — invokes the server for biff
    export fs(1M) — exports and unexports directories to Network File
         System (NFS) clients
    fingerd(1M) — handles requests from remote systems for user
         information from finger
    ftpd(1M) — provide Internet File Transfer Protocol (FTP) service
    inetd(1M) — starts Internet servers when needed
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```
mountd(1M) — invokes the Network File System (NFS) mount-request
         server
    named(1M) — provides Internet domain name service
    portmap(1M) — converts RPC program numbers into DARPA protocol
         port numbers
    remshd(1M) — invokes the remote shell server
    rexecd(1M) — server for remote executions
    rlogind(1M) — server for remote logins
    rstatd(1M) — invokes a server for kernel statistics
    rusersd(1M) — rusers invokes a server for users
    rwalld(1M) — invokes the network rwall server
    rwhod(1M) — invokes the system status server
    sprayd(1M) — returns information for the spray command
    talkd(1M) — invokes the remote user communication server
    telnetd(1M) — supports the DARPA standard TELNET protocol
    tftpd(1M) — responds to requests to use the DARPA Trivial File
         Transfer Protocol
    yppasswdd(1M) — handle requests to change a password served by the
         Network Information Service (NIS)
    yppol1(1M) — reports the version of a Network Information Service
         (NIS) map that is on an NIS server
    ypserv(1M) — provide Network Information Service (NIS) service
    ypset(1M) — sets ypbind to a particular domain and Network
         Information Service (NIS) server
    ypxfr(1M) — transfers a Network Information Service (NIS) map to the
         local system
    servers(4) — Internet server database
    slip.config(4) — establishes the number of available Compressed
         Serial Line/Internet Protocol (CSL/IP) connections
services
    getservent(3N) — get a service entry
    services(4N) — service name database
session status
    logname(1) — gets the login name
    printenv(1) — displays the value of variables set in the current
         environment
    ps(1) — reports process status
    pwd(1) — prints the name of the working directory
    tty(1) — obtains the device filename for the terminal or CommandShell
         window where it is invoked
    whoami(1) — prints effective current user ID
```

```
session, terminal
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
    chsh(1) — changes the default login shell
    csh(1) — runs the C shell, a command interpreter with C-like syntax
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
    rlogin(1N) — logs in to a remote system
    script(1) — starts a shell that records terminal input and output
    sh(1) — runs the Bourne shell
    sh1(1) — manages the layering of multiple shells
    telnet(IC) — communicates with another host via the TELNET
         protocol
    Login(1M) — logs you in to A/UX by using a graphical user interface
    vt102(7) — provides protocols for VT102 terminals
session, user interface preferences
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
    chsh(1) — changes the default login shell
    Login(1M) — logs you in to A/UX by using a graphical user interface
    vt102(7) — provides protocols for VT102 terminals
shared memory
    mkshlib(1) — creates a shared library
    shmct1(2) — shared memory control operations
    shmget(2) — get shared memory segment
    shmop(2) — shared memory operations
shared strings
    xstr(1) — reports strings from C programs to implement shared strings
shell programming, boolean operations
    test(1) — evaluates conditions
    true(1) — provides truth values
shell programming, expression evaluation
    basename(1) — get part of a pathname
    echo(1) — echoes its arguments
    expr(1) — evaluates arguments as an expression
    getopt(1) — parses command options
    rev(1) — reverses characters within each line of text
shell programming, input and output operations
    line(1) — reads one line from the standard input
    query(1) — queries the user for input
    tput(1) — queries terminfo database
    macquery(1M) — posts a Macintosh alert box to query the user
    vt102(7) — provides protocols for VT102 terminals
```

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shells
    chsh(1) — changes the default login shell
    csh(1) — runs the C shell, a command interpreter with C-like syntax
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
    remsh(1N) — invokes to a shell on a remote system
    sh(1) — runs the Bourne shell
    sh1(1) — manages the layering of multiple shells
    remshd(1M) — invokes the remote shell server
    getusershell(3) — generate authenticated pathnames corresponding
         to executable shell programs
    shells(4) — shell pathnames file
    StartupShell(8) — interprets command lines such as those used to
         boot A/UX and check file systems within the A/UX Startup
         application
shutdown
    powerdown(1M) — turns off power to the computer
    shutdown(1M) — terminates processes that support multi-user mode and
         enters single-user mode
sian, numeric
    sign(3F) — returns Fortran transfer-of-sign intrinsic functions
signal stack
    sigstack(2) — set or get signal stack context
signals
    ipcrm(1) — removes interprocess communications facilities
    kill(1) — terminates a process
    kill(2) — sends a signal to a process or a group of processes
    pause(2) — suspends a process until signal
    sigblock(2) — block signals
    sigpause(2) — release blocked signals and wait for interrupt
    signending(2P) — examine pending signals
    sigsetmask(2) — set current signal mask
    sigstack(2) — set or get signal stack context
    sigvec(2) — optional BSD-compatible software signal facilities
    killpg(3N) — sends signal to a process group
    set 42 sig(3) — sets the Berkeley Software Distribution (BSD) 4.2 signal
         interface
    sigaction(3P) — examine or change signal action
    signal(3) — specifies what to do upon receipt of a signal
    signal(3F) — specifies Fortran action on receipt of a system signal
    sigprocmask(3P) — examines and changes blocked signals
    sigsetops(3P) — manipulate signal sets
    sigsuspend(3P) — waits for a signal
    ssignal(3C) — produce software signals
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```
sin(3F) — provide Fortran sine intrinsic functions
    sinh(3F) — provide Fortran hyperbolic sine intrinsic function
    sinh(3M) — provide hyperbolic functions
    trig(3M) — provide trigonometric functions
single-spaced text
    ssp(1) — produces single spaced output
SL/IP
    dslipuser(1M) — displays the current state of the Compressed Serial
         Line/Internet Protocol (CSL/IP) database
    mkslipuser(1M) — creates or updates the Compressed Serial
         Line/Internet Protocol (CSL/IP) database
    slip(1M) — assigns a serial line to a network interface
    slip.config(4) — establishes the number of available Compressed
         Serial Line/Internet Protocol (CSL/IP) connections
    slip.hosts(4) — maps login names to Compressed Serial Line/Internet
         Protocl (CSL/IP) client host names
    slip.user(4) — database of available Compressed Serial Line/Internet
         Protocol (CSL/IP) connections
slides
    mvt(1) — typeset documents that contain troff and mm or mv macro-
         formatting requests
    mv(5) — a troff macro package for typesetting viewgraphs and slides
SNOBOL
    sno(1) — runs the SNOBOL interpreter
SNOBOL programming
    sno(1) — runs the SNOBOL interpreter
".so" macro
    soelim(1) — eliminates the source commands from nroff input
sockets
    accept (2N) — accept a connection on a socket
    bind(2N) — bind a name to a socket
    connect(2N) — initiates a connection on a socket
    getpeername(2N) — gets the name of a connected peer
    getsockname(2N) — gets a socket name
    getsockopt(2N) — get and set options on sockets
    listen(2N) — listens for connections on a socket
    recv(2N) — receive a message from a socket
    send(2N) — send a message from a socket
    shutdown(2N) — shut down part of a full-duplex connection
    socket(2N) — create an endpoint for communication
    socketpair(2) — creates a pair of connected sockets
    appletalk(7) — interfaces with the AppleTalk protocols
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sine

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software loopback
     10(5) — software loopback network interface
sorting
     lorder(1) — finds the ordering relation for an object library
     sort(1) — sorts or merges files
    sortbib(1) — sorts bibliographic database
     tsort(1) — sorts lines in a file topologically
    qsort(3C) — performs a quicker sort
Source Code Control System
    admin(1) — creates and administers SCCS files
    cdc(1) — changes the delta commentary of an SCCS delta
    comb(1) — combines SCCS deltas
    delta(1) — makes a delta (change) to an SCCS file
    get(1) — gets a version of an SCCS file
    help(1) — provides help information about SCCS commands and
         messages
    prs(1) — displays information about an SCCS file
    rmde1(1) — removes a delta from an SCCS file
    sact(1) — displays who has checked a Source Code Control System
         (SCCS) file out for editing
    sccs(1) — performs SCCS subsystem commands
    sccsdiff(1) — compares two versions of an SCCS file
    unget(1) — undoes a previous get of an SCCS file
    val(1) — validate SCCS file
    what(1) — reports identification information for a file
    sccstorcs(1M) — builds an RCS file from an SCCS file
    sccsfile(4) — format of an SCCS file
source text management
    admin(1) — creates and administers SCCS files
    cb(1) — improves spacing and indentation of C source files
    cdc(1) — changes the delta commentary of an SCCS delta
    ci(1) — checks in RCS revisions
    co(1) — checks out RCS revisions
    comb(1) — combines SCCS deltas
    get(1) — gets a version of an SCCS file
    help(1) — provides help information about SCCS commands and
         messages
    ident(1) — displays RCS keywords and their values
    indent(1) — indents and formats C program source
    lint(1) — invokes a C program checker
    make(1) — maintains, updates, and regenerates groups of files
    prs(1) — displays information about an SCCS file
```

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rcs(1) — creates new RCS files or changes attributes of existing RCS files
    rcsdiff(1) — compares RCS revisions
    rcsintro(1) — introduces RCS commands
    rcsmerge(1) — merges two versions of an RCS file
    rlog(1) — displays log messages and other information about RCS files
    rmdel(1) — removes a delta from an SCCS file
    sact(1) — displays who has checked a Source Code Control System
         (SCCS) file out for editing
    SCCS(1) — performs SCCS subsystem commands
    sccsdiff(1) — compares two versions of an SCCS file
    ucbdiff3(1) — reports the differences between three files
    ucbdiff(1) — reports differences between two files or directories
    unget(1) — undoes a previous get of an SCCS file
    val(1) — validate SCCS file
    what (1) — reports identification information for a file
    sccstorcs(1M) — builds an RCS file from an SCCS file
    rcsfile(4) — format of an RCS file
    sccsfile(4) — format of an SCCS file
spaces (in text)
    expand(1) — expand tabs to spaces, and vice versa
spelling
    spell(1) — find spelling errors
spline curves
    spline(1G) — interpolates a smooth curve
spooler management
    cancel(1) — cancels print requests spooled through the 1p command
    enable(1) — enable or disable LP printers
    lpg(1) — queries the print spooler for progress information
    1pr(1) — spools print requests to printers
    lprm(1) — removes jobs from the line printer spooling queue for a
         Berkeley file system (4.2)
    lpstat(1) — prints lp status information
    uustat(1C) — controls uucp jobs and provides status information
    accept(1M) — allows 1p requests
    lpadmin(1M) — configures the lp spooling system
    1pc(1M) — controls the operation of the line printer
    1pd(1M) — supports the Berkeley print spooler." 4.2 line-printer daemon
    lpsched(1M) — start or stop the lp request scheduler and move requests
    lptest(1M) — generates a line-printer ripple pattern
    reject(1M) — prevents LP requests
    transcript(1M) — filter data for the POSTSCRIPT printers
    uucleanup(1M) — removes old files from the uucp spool directory
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spraying
    spray(1M) — sprays packets
    sprayd(1M) — returns information for the spray command
    spray(3N) — scatters data in order to check the network
square root
    exp(3F) — Fortran exponential intrinsic function
    \exp(3M) — provide exponential, logarithm, power, and square root
         functions
    sgrt(3F) — provide Fortran square root intrinsic functions
standard units
    units(1) — rescales quantities according to a the unit of measure
         specified
Star Trek
    trek(6) — plays the game of trek
startup
    login(1) — signs you on a terminal session
    newgrp(1) — logs you into a new group
    Login(1M) — logs you in to A/UX by using a graphical user interface
    StartMonitor(1M) — displays a progress bar during the A/UX boot
         sequence
    brc(1M) — execute system initialization shell scripts
    init(1M) — spawn general processes
    killall(1M) — kills all active processes
    powerdown(1M) — turns off power to the computer
    reboot(1M) — reboots the operating system
    shutdown(1M) — terminates processes that support multi-user mode and
         enters single-user mode
    startmsq(1M) — sends messages to StartMonitor, which displays a
         progress bar during the A/UX boot process
    startup(1M) — runs startup programs at boot time
    reboot(2) — reboot system or halt processor
    auxstartuprc(4) — authorization file that helps password-protect and
         otherwise secure A/UX Startup
    inittab(4) — script for the init process
    StartupShell(8) — interprets command lines such as those used to
         boot A/UX and check file systems within the A/UX Startup
         application
    intro(8) — introduces commands executed from the A/UX Startup shell
statistics
    lav(1) — displays load average statistics
    ff(1M) — lists file names and statistics for a System V file system
    ncstats(1M) — displays kernel name cache statistics
    nfsstat(1M) — displays Network File System (NFS) statistics
    rstatd(1M) — invokes a server for kernel statistics
```

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statfs(2) — gets file-system statistics
    ustat(2) — gets file system statistics
status
    hostname(1N) — sets or displays the name of the current host system
    last(1) — displays login and logout times for each user of the system
    lpq(1) — queries the print spooler for progress information
    lpstat(1) — prints lp status information
    netstat(1N) — displays network status information
    ps(1) — reports process status
    ruptime(1N) — displays the host status of local machines
    tty(1) — obtains the device filename for the terminal or CommandShell
         window where it is invoked
    uptime(1) — reports how long system has been up
    users(1) — reports a list of the users who are logged on to the system
    w(1) — displays a summary of the current system activity
    who(1) — reports users who are currently logged in to the system
    whoami(1) — prints effective current user ID
    mount (1M) — mount and unmount file systems
    pstat(1M) — prints system facts
    rwhod(1M) — invokes the system status server
    showmount (1M) — shows all remote mounts
    whodo(1M) — informs you of the current system activity
    rstat(3N) — get performance data from remote kernel
    rtime(3) — gets remote time
status, file system
    df(1) — reports the used and unused storage capacity for a file system
    du(1) — summarizes disk usage
status, session
    logname(1) — gets the login name
    printenv(1) — displays the value of variables set in the current
         environment
    ps(1) — reports process status
    pwd(1) — prints the name of the working directory
    tty(1) — obtains the device filename for the terminal or CommandShell
         window where it is invoked
    whoami(1) — prints effective current user ID
status, system
    finger(1) — displays information about the users on a system
    groups(1) — displays group memberships
    hostid(1N) — sets or displays the identifier of the current host system
    hostname(1N) — sets or displays the name of the current host system
    id(1) — displays user and group IDs and names
    last(1) — displays login and logout times for each user of the system
    machid(1) — provide truth values about processor type
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pagesize(1) — displays the system page size
     uname(1) — displays identification information about the current system
     uptime(1) — reports how long system has been up
     users(1) — reports a list of the users who are logged on to the system
     w(1) — displays a summary of the current system activity
    who(1) — reports users who are currently logged in to the system
    whodo(1M) — informs you of the current system activity
streams (data)
     line sane(1M) — pushes streams line disciplines
     fclose(3S) — close or flush a stream
     ferror(3S) — stream status inquiries
     fopen(3S) — open a stream
     fread(3S) — produce binary input/output
     fseek(3S) — reposition a file pointer in a stream
     getc(3S) — get character or word from a stream
     gets(3S) — get a string from a stream
     line_push(3) — routine used to push streams line disciplines
    printf(3S) — format and output string and numeric data
    putc(3S) — put a character or word on a stream
     puts(3S) — put a string on a stream
     rcmd(3N) — routines for returning a stream to a remote command
     rexec(3N) — returns a stream to a remote command
     scanf(3S) — convert formatted input
     setbuf(3S) — assign buffering to a stream
    ungetc(3S) — pushes a character back into input stream
    streams(7) — provides an interface for character I/O
strings
    basename(1) — get part of a pathname
    grep(1) — search a file for a specific pattern
    rev(1) — reverses characters within each line of text
     strings(1) — finds the printable strings in an object or other binary file
    xstr(1) — reports strings from C programs to implement shared strings
    atof(3C) — converts an ASCII string to floating-point number
    bstring(3) — bit and byte string operations
    ecvt(3C) — convert floating-point number to string
    gets(3S) — get a string from a stream
     index(3F) — return location of Fortran substring
    len(3F) — return length of Fortran string
    1ge(3F) — string comparision intrinsic functions
    puts(3S) — put a string on a stream
    string(3C) — provide string operations
    strtod(3C) — converts a string to a double-precision number
    strto1(3C) — convert strings to integer
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subroutines
    intro(3) — introduces the subroutines and libraries
subtraction
    dim(3F) — Fortran positive difference intrinsic functions
superblock
    sync(1) — updates the superblock
    fsck(1M) — checks file-system consistency and interactively repairs the
         file system
    mkfs(1M) — constructs a System V file system
    sync(2) — update superblock
    inode(4) — format of a System V inode
    svfs(4) — System V system volume format
    ufs(4) — UFS file-system format
suspend execution
    sh1(1) — manages the layering of multiple shells
    sleep(1) — suspends the system for a specified interval of time
    signals and wait for interrupt
    wait3(2N) — wait for child process to stop or terminate
    wait(2) — wait for child process to stop or terminate
    sigsuspend(3P) — waits for a signal
    sleep(3C) — suspends execution for interval
    tcdrain(3P) — provide line control functions
    usleep(3) — suspend execution for interval
SVFS
    mkfs(1M) — constructs a System V file system
    dir(4) — format of System V directories
    inode(4) — format of a System V inode
    svfs(4) — System V system volume format
swapping (memory)
    swap(1M) — adds disk blocks to or deletes them from the swap area
    swab(3C) — swaps bytes
symbol table
    cc(1) — invokes the C compiler
    1d(1) — invokes the link editor for common object files
    nm(1) — displays the symbol table of a common object file
    strip(1) — strips symbol and line number information from an object file
    1dgetname(3X) — retrieves symbol name for object file symbol table
         entry
    ldtbindex(3X) — compute index of a symbol table entry of a common
         object file
    ldtbread(3X) — read an indexed symbol table entry of a common
         object file
    ldtbseek(3X) — seek to the symbol table of a common object file
    nlist(3C) — gets entries from name list
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syms(4) — common object file symbol table format
synchronization
    select(2N) — synchronous I/O multiplexing
system activity
    ipcs(1) — reports interprocess communication facilities status
    lav(1) — displays load average statistics
    ps(1) — reports process status
    sag(1G) — generates a system activity graph
    sar(1) — reports system activity
    sysline(1) — displays the system status on the status line of a terminal
    timex(1) — reports the elapsed, user, and system time during the
         execution of a command
    w(1) — displays a summary of the current system activity
    acct(1M) — present an overview of accounting commands
    acctcms(1M) — summarizes commands from per-process accounting
         records
    acctcom(1M) — searches and formats process accounting files
    acctcon(1M) — invoke connect-time accounting
    acctmerg(1M) — merges or adds accounting files
    acctprc(1M) — provide process accounting
    acctsh(1M) — provide shell procedures for accounting
    diskusg(1M) — generates disk accounting data by user ID
     fwtmp(1M) — manipulate connect accounting records
    pac(1M) — gathers printer/plotter accounting information
    runacct(1M) — runs daily accounting
    sadc(1M) — report system activity
    whodo(1M) — informs you of the current system activity
system administration, backing up file systems
    bcopy(1M) — copies blocks interactively
    dcopy(1M) — copies System V File System-style file systems for optimal
         access time
    dump.bsd(1M) — create a dump.bsd archive by making copies of files
         from a given file system
    escher(1M) — helps you with autorecovery administration
    eu(1M) — updates autorecovery files
    eupdate(1M) — updates important files for autorecovery purposes
    finc(1M) — generates a fast incremental backup for System V file
         systems
    frec(1M) — recovers files from a backup tape
    restore(1M) — retrieve files from within a dump.bsd archive into an
         existing file system
    volcopy(1M) — copy file systems with label checking
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system administration, file systems
    df(1) — reports the used and unused storage capacity for a file system
    du(1) — summarizes disk usage
    fstyp(1) — reports the file-system type
    sync(1) — updates the superblock
    clri(1M) — clears inodes
    devnm(1M) — displays the current device name
    f f(1M) — lists file names and statistics for a System V file system
    fsck(1M) — checks file-system consistency and interactively repairs the
         file system
    fsdb(1M) — debugs the file system
    fsentry(1M) — creates an entry in the file-system table
    fsirand(1M) — installs random inode generation numbers
    fsstat(1M) — reports the state of a file system
    fuser(1M) — identifies processes using a file or file structure
    mkfs1b(1M) — constructs a file system with 512-byte blocks
    mkfs(1M) — constructs a System V file system
    mklost+found(1M) — makes a directory named lost+found to be
         used by fsck
    mount (1M) — mount and unmount file systems
    ncheck(1M) — locates the filename associated with an i-number
    newfs(1M) — makes a Berkeley 4.2 (UFS) file system
    tunefs(1M) — tunes a Berkeley 4.2 (UFS) file system
system administration, general
    checkinstall(1) — checks the installation of boards
    tset(1) — set or reset the terminal to a sensible state
    badblk(1M) — sets or updates bad block information
    chgnod(1M) — changes the current A/UX system node name
    diskformat(1M) — formats a disk through a driver-dependent format
         operation
    dp(1M) — performs disk partitioning
    getty(1M) — set the initial communication modes, such as speed and
         line discipline, for the purpose of logging users in to A/UX through
    line_sane(1M) — pushes streams line disciplines
    pname(1M) — associates named partitions with device files
    setport(1M) — sets the characteristics of a serial port
    settimezone(1M) — sets the local time zone
    swap(1M) — adds disk blocks to or deletes them from the swap area
    tic(1M) — compiles (translates) terminfo files
    tty_add(1M) — modify the /etc/inittab file in terms of enabling
         serial ports for use as login terminals
    t zdump(1M) — displays the date and time for one or more time zones
    tzic(1M) — compiles time-zone information files that are required to set
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the local time-zone
system administration, installing software
    cpset(1M) — installs files in specified directories
     finstall(1M) — installs A/UX software from specially prepared floppy
         disks
     install(IM) — places files in specified directories
system administration, kernel
    autoconfig(1M) — creates an up-to-date kernel
    kconfig(1M) — tunes kernel parameters for work-load optimization
    module_dump(1M) — queries kernel files for configuration information
    newconfig(1M) — generates an up-to-date kernel
    newunix(1M) — manipulates the files that determine the configuration of
         a new kernel
system administration, mail
    rmail(1) — handles remote mail received via UUCP
    comsat(1M) — invokes the server for biff
    mailg(1M) — lists the contents of the mail queue
    newaliases(1M) — rebuilds the database for the mail aliases file
    sendmail(1M) — sends mail
system administration, NFS file systems
    domainname(1) — sets or displays the name of the Network Information
         Service (NIS) domain
    automount(1M) — mounts Network File System (NFS) when needed
    export fs(1M) — exports and unexports directories to Network File
         System (NFS) clients
    lockd(1M) — handle local and remote lock requests
    mountd(1M) — invokes the Network File System (NFS) mount-request
    nfsd(1M) — invoke the NFS daemons
    nfsstat(1M) — displays Network File System (NFS) statistics
    rpcinfo(1M) — reports RPC information
    showmount(1M) — shows all remote mounts
    spray(1M) — sprays packets
    sprayd(1M) — returns information for the spray command
    statd(1M) — provide crash and recovery monitoring for network locking
         services
system administration, spoolers
    enable(1) — enable or disable LP printers
    lpstat(1) — prints lp status information ·
    accept(1M) — allows 1p requests
    lpadmin(1M) — configures the lp spooling system
    lpc(1M) — controls the operation of the line printer
    1pd(1M) — supports the Berkeley print spooler." 4.2 line-printer daemon
    lpsched(1M) — start or stop the lp request scheduler and move requests
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lptest(1M) — generates a line-printer ripple pattern
    reject(1M) — prevents LP requests
    transcript(1M) — filter data for the POSTSCRIPT printers
system administration, user accounts
    chfn(1) — changes the real-name field of your password file entry for use
         by finger
    chsh(1) — changes the default login shell
    finger(1) — displays information about the users on a system
    adduser(1M) — adds a user account
    fingerd(1M) — handles requests from remote systems for user
         information from finger
    pwck(1M) — check the password/group files
    vipw(1M) — edits the password file
system administration, utilities for
    su(1) — substitutes user ID
    dev kill(1M) — removes device files from a directory
    mknod(1M) — builds a device file
system administration, UUCP
    Uutry(1M) — contacts a remote system with debugging on
    uucheck(1M) — checks the uucp directories and files
    uucico(1M) — transfers files as specified by uucp work files
    uucleanup(1M) — removes old files from the uucp spool directory
    uucpd(1M) — handles the transfer of files by uucico over TCP/IP
         connections
    uudemon.admin(1M) — mails current uucp work status to the uucp
         administrator
    uudemon.cleanup(1M) — cleans up files in the uucp spool directory
    uudemon.hour(1M) — processes spooled uucp requests
    uudemon.pol1(1M) — sets up polling for selected systems
    uusched(1M) — schedules uucp file transfers
system calls
    intro(2) — introduces system calls and error numbers
    syscall(2) — indirect system call
system configuration
    checkinstall(1) — checks the installation of boards
    tset(1) — set or reset the terminal to a sensible state
    adduser(1M) — adds a user account
    autoconfig(1M) — creates an up-to-date kernel
    badblk(1M) — sets or updates bad block information
    chgnod(1M) — changes the current A/UX system node name
    diskformat(1M) — formats a disk through a driver-dependent format
        operation
    dp(1M) — performs disk partitioning
    getty(1M) — set the initial communication modes, such as speed and
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line discipline, for the purpose of logging users in to A/UX through
         serial lines
    init(1M) — spawn general processes
    kconfig(1M) — tunes kernel parameters for work-load optimization
    line_sane(1M) — pushes streams line disciplines
    lpadmin(1M) — configures the lp spooling system
    module_dump(1M) — queries kernel files for configuration information
    newconfig(1M) — generates an up-to-date kernel
    newunix(1M) — manipulates the files that determine the configuration of
         a new kernel
    pname(1M) — associates named partitions with device files
    pstat(1M) — prints system facts
    setport(1M) — sets the characteristics of a serial port
    settimezone(1M) — sets the local time zone
    slattconf(1M) — attaches a serial line to a network interface and
         configures the network interface
    swap(1M) — adds disk blocks to or deletes them from the swap area
    tic(1M) — compiles (translates) terminfo files
    tty add(1M) — modify the /etc/inittab file in terms of enabling
         serial ports for use as login terminals
    tzdump(1M) — displays the date and time for one or more time zones
    tzic(1M) — compiles time-zone information files that are required to set
         the local time-zone
    uvar(2) — returns system-specific configuration information
    gettydefs(4) — speed and terminal settings used by getty
    inittab(4) — script for the init process
    master(4) — master kernel-configuration file format
system crashes
    errdead(1M) — extracts error records from a crash dump
    statd(1M) — provide crash and recovery monitoring for network locking
         services
system folder, personalizing
    systemfolder(1) — create a personal System Folder
system kernel, generation of
    autoconfig(1M) — creates an up-to-date kernel
    kconfig(1M) — tunes kernel parameters for work-load optimization
    module_dump(1M) — queries kernel files for configuration information
    newconfig(1M) — generates an up-to-date kernel
    newunix(1M) — manipulates the files that determine the configuration of
         a new kernel
system name
    hostname(1N) — sets or displays the name of the current host system
    uname(1) — displays identification information about the current system
    uname(2) — get name of current system
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HOSTNAME(4) — host name and domain name database
system startup and shutdown
    StartMonitor(1M) — displays a progress bar during the A/UX boot
         sequence
    brc(1M) — execute system initialization shell scripts
    init(1M) — spawn general processes
    killall(1M) — kills all active processes
    powerdown(1M) — turns off power to the computer
    reboot(1M) — reboots the operating system
    shutdown(1M) — terminates processes that support multi-user mode and
         enters single-user mode
    startmsg(1M) — sends messages to StartMonitor, which displays a
         progress bar during the A/UX boot process
    startup(1M) — runs startup programs at boot time
system status
    finger(1) — displays information about the users on a system
    groups(1) — displays group memberships
    hostid(1N) — sets or displays the identifier of the current host system
    hostname(1N) — sets or displays the name of the current host system
    id(1) — displays user and group IDs and names
    last(1) — displays login and logout times for each user of the system
    lpq(1) — queries the print spooler for progress information
    lpstat(1) — prints lp status information
    machid(1) — provide truth values about processor type
    netstat(1N) — displays network status information
    pagesize(1) — displays the system page size
    ps(1) — reports process status
    ruptime(1N) — displays the host status of local machines
    tty(1) — obtains the device filename for the terminal or CommandShell
         window where it is invoked
    uname(1) — displays identification information about the current system
    uptime(1) — reports how long system has been up
    users(1) — reports a list of the users who are logged on to the system
    w(1) — displays a summary of the current system activity
    who(1) — reports users who are currently logged in to the system
    whoami(1) — prints effective current user ID
    errdead(1M) — extracts error records from a crash dump
    errdemon(1M) — calls the error-logging daemon
    errpt(1M) — processes a report of logged errors
    errstop(1M) — terminates the error-logging daemon
    exterr(1M) — turns on/off the reporting of extended errors
    mount (1M) — mount and unmount file systems
    ncstats(1M) — displays kernel name cache statistics
    pstat(1M) — prints system facts
```

```
rwhod(1M) — invokes the system status server
    showmount(1M) — shows all remote mounts
    whodo(1M) — informs you of the current system activity
system time
    date(1) — displays and sets the date
    settimezone(1M) — sets the local time zone
    adjtime(2) — correct the system time
    gettimeofday(2) — get/set date and time
    time(2) — get time
system variables
    kconfig(1M) — tunes kernel parameters for work-load optimization
    sysconf(3P) — gets configurable system variables
tables (in text)
    col(1) — filters text containing printer control sequences for use at a
         display device
    deroff(1) — removes nroff/troff, tbl, and eqn constructs
    tbl(1) — table formatter for nroff or troff
tabs
    expand(1) — expand tabs to spaces, and vice versa
    tabs(1) — sets the tab stops on a terminal
tags
    ctags(1) — maintains a tags file for a C program
tangent
    tan(3F) — Fortran tangent intrinsic function
    tanh(3F) — Fortran hyperbolic tangent intrinsic function
    trig(3M) — provide trigonometric functions
tape (backup)
    cp(1) — copies files
    cpio(1) — copies files to or from a cpio archive
    pax(1) — copies files to or from an archive in an IEEE format
    tar(1) — copies files to or from a tar archive
    dump.bsd(1M) — create a dump.bsd archive by making copies of files
         from a given file system
    finc(1M) — generates a fast incremental backup for System V file
         systems
    frec(1M) — recovers files from a backup tape
    restore(1M) — retrieve files from within a dump. bsd archive into an
         existing file system
    dump.bsd(4) — format of a file-system dump
    tc(7) — tape device driver
tape drives
    mt(1) — manipulates magnetic tape media
    tar(1) — copies files to or from a tar archive
    tcb(1) — blocks data to 8K for direct input to /dev/rmt/tcx
```

```
tp(1) — copies files to or from a tp archive
    tar(4) — format of tar header
    mtio(7) — provides an interface library for magnetic tape devices
    tc(7) — tape device driver
TCP
     trpt(1M) — prints a readable description of TCP trace records
TCP/IP, maintenance of
    netstat(1N) — displays network status information
    nslookup(1) — interactively queries name servers
    arp(1M) — displays and modifies the address translation table
    dslipuser(1M) — displays the current state of the Compressed Serial
         Line/Internet Protocol (CSL/IP) database
    etheraddr(1M) — displays the Ethernet address of each Ethernet card
         in your system
    ftpd(1M) — provide Internet File Transfer Protocol (FTP) service
    ifconfig(1M) — manages network interfaces
    inetd(1M) — starts Internet servers when needed
    mkslipuser(1M) — creates or updates the Compressed Serial
         Line/Internet Protocol (CSL/IP) database
    named(1M) - provides Internet domain name service
    ping(1M) — exercises the TCP/IP network by sending Internet Control
         Message Protocol (ICMP) packets to a named host
    portmap(1M) — converts RPC program numbers into DARPA protocol
         port numbers
    remshd(1M) — invokes the remote shell server
    rexecd(1M) — server for remote executions
    rlogind(1M) — server for remote logins
    route(1M) — manipulates the routing tables
    routed(1M) — invokes the network routing daemon
    rstatd(1M) — invokes a server for kernel statistics
    rusersd(1M) — rusers invokes a server for users
    rwalld(1M) — invokes the network rwall server
    rwhod(1M) — invokes the system status server
    slattach(1M) — attaches a serial line to a network interface
    slattconf(1M) — attaches a serial line to a network interface and
         configures the network interface
    stdhosts(1M) — converts Internet addresses to standard form
    talkd(1M) — invokes the remote user communication server
    telnetd(1M) — supports the DARPA standard TELNET protocol
    trpt(1M) — prints a readable description of TCP trace records
Tektronix 4014 terminal
    4014(1) — filters text containing printer control sequences a page at a
         time
    tc(1) — interprets troff output for use at a vintage display device
```

```
Teletype Model 37
     greek(5) — graphics for the extended TTY-37 type-box
teletype transmission
     tset(1) — set or reset the terminal to a sensible state
TELNET
     telnet(1C) — communicates with another host via the TELNET
         protocol
     telnetd(1M) — supports the DARPA standard TELNET protocol
terminal capabilities
     300(1) — filter text containing printer control sequences for a DASI
         terminal
     4014(1) — filters text containing printer control sequences a page at a
         time
     450(1) — filters text containing printer control sequences for the DASI
         terminal
     tput(1) — queries terminfo database
     termcap(3X) — provide terminal independent operation routines
     printcap(4) — printer-capability database
     term(4) — format of compiled term file
     termcap(4) — terminal capability database
     terminfo(4) — terminal capability database
terminal emulation
     CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
    vt102(7) — provides protocols for VT102 terminals
terminal modes
     stty(1) — sets the modes for a terminal
     termio(7) — provides a general terminal interface
terminal names
     term(5) — conventional names for terminals
terminal screen
     clear(1) — clears the terminal screen
     col(1) — filters text containing printer control sequences for use at a
         display device
     colcrt(1) — filters nroff output for terminal previewing
    u1(1) — filters special underlining sequences imbedded in text for use at a
         display device
    curses 5.0(3X) — provides BSD-style screen functions with optimal
         cursor motion
    curses(3X) — CRT screen handling and optimization package
terminal session
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
    chsh(1) — changes the default login shell
```

```
csh(1) — runs the C shell, a command interpreter with C-like syntax
    ksh(1) — runs the Korn shell, an enhanced command interpreter that is
         backward-compatible with the Bourne shell (sh)
     rlogin(1N) — logs in to a remote system
     script(1) — starts a shell that records terminal input and output
     sh(1) — runs the Bourne shell
     sh1(1) — manages the layering of multiple shells
     telnet(1C) — communicates with another host via the TELNET
         protocol
    Login(1M) — logs you in to A/UX by using a graphical user interface
    vt102(7) — provides protocols for VT102 terminals
terminal settings
    stty(1) — sets the modes for a terminal
    tabs(1) — sets the tab stops on a terminal
    getty(1M) — set the initial communication modes, such as speed and
         line discipline, for the purpose of logging users in to A/UX through
         serial lines
    keyset(1M) — sets the keyboard for the console
    gettydefs(4) — speed and terminal settings used by getty
    ioctl.svscon(4) — console terminal settings file
    vt102(7) — provides protocols for VT102 terminals
terminal types
    getty(1M) — set the initial communication modes, such as speed and
         line discipline, for the purpose of logging users in to A/UX through
         serial lines
    termcap(3X) — provide terminal independent operation routines
    termcap(4) — terminal capability database
    terminfo(4) — terminal capability database
    ttytype(4) — database of terminal types by port
    vt102(7) — provides protocols for VT102 terminals
terminals, general
    clear(1) — clears the terminal screen
    ct(1C) — runs login on a dial-up line
    greek(1) — filters text for vintage display devices
    last(1) — displays login and logout times for each user of the system
    stty(1) — sets the modes for a terminal
    tabs(1) — sets the tab stops on a terminal
    tset(1) — set or reset the terminal to a sensible state
    ttv(1) — obtains the device filename for the terminal or CommandShell
         window where it is invoked
    tic(1M) — compiles (translates) terminfo files
    tty_add(1M) — modify the /etc/inittab file in terms of enabling
         serial ports for use as login terminals
    ctermid(3S) — generate filename for terminal
```

```
dial(3C) — establishes an out-going terminal line connection
    tcgetattr(3P) — get and set the terminal state
    termcap(3X) — provide terminal independent operation routines
    ttyname(3C) — find name of a terminal
    nterm(5) — terminal driving tables for nroff
    pty(7) — provides a pseudo terminal driver
    termio(7) — provides a general terminal interface
    termios(7P) — provides a A/UX® POSIX general terminal interface
    tty(7) — controls the terminal interface
    vt102(7) — provides protocols for VT102 terminals
termination, process
    kill(1) — terminates a process
    nohup(1) — runs a command so that it can continue to run even after your
         session has ended
    killall(1M) — kills all active processes
    shutdown(1M) — terminates processes that support multi-user mode and
         enters single-user mode
    exit(2) — terminate process
    abort(3C) — generates an IOT fault
    abort(3F) — terminates a Fortran program
testing a line printer
    lptest(1M) — generates a line-printer ripple pattern
testing a network
    ping(1M) — exercises the TCP/IP network by sending Internet Control
         Message Protocol (ICMP) packets to a named host
    10(5) — software loopback network interface
text, checking embedded markups for errors
    checkmm(1) — check documents formatted with the mm macros
    checknr(1) — checks nroff/troff files
    deroff(1) — removes nroff/troff, tbl, and eqn constructs
    diffmk(1) — marks the differences between two files
    hyphen(1) — finds hyphenated words
    macref(1) — produces a cross-reference listing of macro files
text, editing
    TextEditor(1) — lets you edit files interactively through mouse and
         menu operations
    bfs(1) — edits big files
    ed(1) — edit text
    ex(1) — edit text
    n1(1) — processes a file through a line numbering filter
    ssp(1) — produces single spaced output
    vi(1) — invokes the screen-oriented (visual) display editor
```

```
text, establishing fonts for troff typesetting
    makedev(1) — prepares troff description files
text, filtering out printer motions
     300(1) — filter text containing printer control sequences for a DASI
         terminal
     4014(1) — filters text containing printer control sequences a page at a
     450(1) — filters text containing printer control sequences for the DASI
         terminal
     col(1) — filters text containing printer control sequences for use at a
         display device
     colcrt(1) — filters nroff output for terminal previewing
     greek(1) — filters text for vintage display devices
     t_{\rm C}(1) — interprets troff output for use at a vintage display device
     u1(1) — filters special underlining sequences imbedded in text for use at a
         display device
text, formatting and typesetting
     daps(1) — invokes the Autologic APS-5 phototypesetter troff post-
         processor
     enscript(1) — converts text files to format for printing
     eqn(1) — format mathematical text for troff
     fmt(1) — invokes a simple text formatter
     fold(1) — folds long lines for finite-width output device
    mm(1) — formats documents that contain nroff and mm macro
         formatting requests
    mmt(1) — typeset documents that contain troff and mm or my macro-
         formatting requests
    mvt(1) — typeset documents that contain troff and mm or mv macro-
         formatting requests
    negn(1) — formats mathematical text for nroff
    newform(1) — changes the format of a text file
    nroff(1) — text formatter
    otroff(1) — formats text for a specific phototypesetter
    pr(1) — formats text for a print device
    psdit(1) — converts troff intermediate format to POSTSCRIPT format
    psroff(1) — formats a file through troff so it can be printed on a
         POSTSCRIPT printer
    roffbib(1) — prints out all records in a bibliographic database
    tbl(1) — table formatter for nroff or troff
    troff(1) — formats and typesets files
text lines, filling and wrapping
     fmt(1) — invokes a simple text formatter
     fold(1) — folds long lines for finite-width output device
```

```
text lines, processing
     awk(1) — scans a file for lines that match a specific pattern
     colrm(1) — removes columns from a file
     comm(1) — selects or rejects lines common to two sorted files
     cut(1) — cuts out selected fields of each line of a file
     grep(1) — search a file for a specific pattern
     head(1) — displays the first few lines of a file
     join(1) — combines (joins) two relational files
     line(1) — reads one line from the standard input
     newform(1) — changes the format of a text file
     n1(1) — processes a file through a line numbering filter
     paste(1) — merges lines of several files or subsequent lines of one file
     rev(1) — reverses characters within each line of text
     sed(1) — edits a stream of data
     sort(1) — sorts or merges files
     tail(1) — displays the last part of a file
     uniq(1) — reports repeated lines in a file
     wc(1) — counts characters, words, and lines in a file
text, preprocessing before formatting and typesetting
     cw(1) — prepare constant-width text for otroff
     egn(1) — format mathematical text for troff
     grap(1) — invokes a pic preprocessor for drawing graphs
     negn(1) — formats mathematical text for nroff
     pic(1) — preprocesses troff files that contain drawings
     soelim(1) — eliminates the source commands from nroff input
     tbl(1) — table formatter for nroff or troff
text, processing of tabs within
     expand(1) — expand tabs to spaces, and vice versa
     newform(1) — changes the format of a text file
text processor
     awk(1) — scans a file for lines that match a specific pattern
     col(1) — filters text containing printer control sequences for use at a
         display device
     comm(1) — selects or rejects lines common to two sorted files
     cpp(1) — invokes the C language preprocessor
     daps(1) — invokes the Autologic APS-5 phototypesetter troff post-
         processor
     deroff(1) — removes nroff/troff, tbl, and eqn constructs
     egn(1) — format mathematical text for troff
     expand(1) — expand tabs to spaces, and vice versa
     fmt(1) — invokes a simple text formatter
     fold(1) — folds long lines for finite-width output device
     grap(1) — invokes a pic preprocessor for drawing graphs
     iw2(1) — prepares data to be printed on the Apple ImageWriter II printer
```

```
m4(1) — processes macros for C and other languages
     negn(1) — formats mathematical text for nroff
     pic(1) — preprocesses troff files that contain drawings
     pr(1) — formats text for a print device
     rev(1) — reverses characters within each line of text
     sed(1) — edits a stream of data
     sort(1) — sorts or merges files
     ssp(1) — produces single spaced output
     tabs(1) — sets the tab stops on a terminal
     tbl(1) — table formatter for nroff or troff
     tr(1) — translates characters
     uniq(1) — reports repeated lines in a file
text, searches
     freq(1) — reports character frequencies in a file
     grep(1) — search a file for a specific pattern
     lookbib(1) — finds references in a bibliography
     wc(1) — counts characters, words, and lines in a file
text, transforming
     awk(1) — scans a file for lines that match a specific pattern
    m4(1) — processes macros for C and other languages
     sed(1) — edits a stream of data
     tr(1) — translates characters
text, utilities for generating and spell checking
     addbib(1) — creates or extends a bibliographic database
     diction(1) — locate wordy sentences in a document
     indxbib(1) — builds an inverted index for a bibliography
     ndx(1) — creates a subject-page index for a document
    ptx(1) — generates a permuted index
     refer(1) — finds and inserts literature references in documents
     sortbib(1) — sorts bibliographic database
     spell(1) — find spelling errors
     style(1) — analyzes the surface characteristics of documents
     subj(1) — generates a list of subjects from documents
TFTP (Trivial File Transfer Protocol)
     tftp(1C) — transfers files via the Trivial File Transfer Protocol (TFTP)
     tftpd(1M) — responds to requests to use the DARPA Trivial File
         Transfer Protocol
three-byte integers
     13to1(3C) — convert between 3-byte integers and long integers
tic-tac-toe
    ttt(6) — play the game of tic-tac-toe
```

```
time and date
    cal(1) — displays a calendar
    calendar(1) — provides a reminder service
    date(1) — displays and sets the date
    leave(1) — reminds you when you have to leave
    cron(1M) — runs the clock daemon
    settimezone(1M) — sets the local time zone
    gettimeofday(2) — get/set date and time
    stime(2) — set time
    time(2) — get time
    ctime(3) — convert date and time to ASCII
    tzfile(4) — time-zone information
    nvram(7) — provides an interface to nonvolatile memory
time zones
    settimezone(1M) — sets the local time zone
    tzdump(1M) — displays the date and time for one or more time zones
    tzic(1M) — compiles time-zone information files that are required to set
         the local time-zone
    tzfile(4) — time-zone information
timers
    leave(1) — reminds you when you have to leave
    getitimer(2) — get/set value of interval timer
toolbox, Macintosh
    slots(3X) — provides ROM library functions
topological sorting
    tsort(1) — sorts lines in a file topologically
tracina
    trpt(1M) — prints a readable description of TCP trace records
    ptrace(2) — process trace
TranScript®
    transcript(1M) — filter data for the POSTSCRIPT printers
transferring files
    cpio(1) — copies files to or from a cpio archive
    cu(1C) — establishes an interactive connection with another system
    ftp(1N) — transfers files by using the DARPA Internet File Transfer
         Protocol (FTP)
    kermit(1C) — invokes the Kermit file-transfer program
    pax(1) — copies files to or from an archive in an IEEE format
    rcp(1C) — copies files between two systems
    remsh(1N) — invokes to a shell on a remote system
    tar(1) — copies files to or from a tar archive
    tftp(1C) — transfers files via the Trivial File Transfer Protocol (TFTP)
    tip(1C) — establishes a connection to a remote system
    updater(1) — updates files between two machines
```

```
uucp(1C) — copies files from one system to another system
    uuencode(1C) — encode and decode a binary file
    ftpd(1M) — provide Internet File Transfer Protocol (FTP) service
    tftpd(1M) — responds to requests to use the DARPA Trivial File
         Transfer Protocol
    uucico(1M) — transfers files as specified by uucp work files
translators
    tr(1) — translates characters
    uuencode(1C) — encode and decode a binary file
    conv(3C) — translate characters
    number (6) — converts Arabic numerals to English
Transliterate Protocol Trace
    trpt(1M) — prints a readable description of TCP trace records
trigonometry
    acos(3F) — Fortran arccosine intrinsic function
    asin(3F) — Fortran arcsine intrinsic function
    atan2(3F) — Fortran arctangent intrinsic function
    atan(3F) — Fortran arctangent intrinsic function
    cos(3F) — Fortran cosine intrinsic function
    sin(3F) — provide Fortran sine intrinsic functions
    tan(3F) — Fortran tangent intrinsic function
    trig(3M) — provide trigonometric functions
Trivial File Transfer Protocol
    tftp(1C) — transfers files via the Trivial File Transfer Protocol (TFTP)
    tftpd(1M) — responds to requests to use the DARPA Trivial File
         Transfer Protocol
troff
    checknr(1) — checks nroff/troff files
    cw(1) — prepare constant-width text for otroff
    deroff(1) — removes nroff/troff, tbl, and ean constructs
    diffmk(1) — marks the differences between two files
    eqn(1) — format mathematical text for troff
    makedev(1) — prepares troff description files
    mm(1) — formats documents that contain nroff and mm macro
         formatting requests
    mmt(1) — typeset documents that contain troff and mm or mv macro-
         formatting requests
    mvt(1) — typeset documents that contain troff and mm or mv macro-
         formatting requests
    otroff(1) — formats text for a specific phototypesetter
    pic(1) — preprocesses troff files that contain drawings
    psdit(1) — converts troff intermediate format to POSTSCRIPT format
    psroff(1) — formats a file through troff so it can be printed on a
         POSTSCRIPT printer
```

```
soelim(1) — eliminates the source commands from nroff input
    tbl(1) — table formatter for nroff or troff
    tc(1) — interprets troff output for use at a vintage display device
    troff(1) — formats and typesets files
    eqnchar(5) — special character definitions for eqn and neqn
     font(5) — description files for device-independent troff
    mptx(5) — the macro package for formatting a permuted index
    ms(5) — text formatting macros
    troff(5) — description of troff output language
true and false
    test(1) — evaluates conditions
     true(1) — provides truth values
truncation
     truncate(2) — truncate a file to a specified length
tuning
    kconfig(1M) — tunes kernel parameters for work-load optimization
types, data
    ftype(3F) — explicit Fortran type conversion
    xdr(3N) — provide library routines for external data representation
    types(5) — primitive system data types
UFS
    newfs(1M) — makes a Berkeley 4.2 (UFS) file system
    tunefs(1M) — tunes a Berkeley 4.2 (UFS) file system
    ufs(4) — UFS file-system format
underlining
    u1(1) — filters special underlining sequences imbedded in text for use at a
         display device
UNIX-to-UNIX system communications
    uucp(1C) — copies files from one system to another system
    uuencode(1C) — encode and decode a binary file
    uuqlist(1C) — displays the service grades that are available on your
         system
    uulog(1C) — displays information about uucp file transfers
    uuname(1C) — displays the names of systems to which uucp and cu can
         connect
    uusend(1C) — sends a file to a remote host
    uustat(1C) — controls uucp jobs and provides status information
    uuto(1C) — provide an easy interface to the uucp command, using the
         public directories
    uux(1C) — runs a command on a remote system
    Uutry(1M) — contacts a remote system with debugging on
    uucheck(1M) — checks the uucp directories and files
    uucico(1M) — transfers files as specified by uucp work files
    uucleanup(1M) — removes old files from the uucp spool directory
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```
uucpd(1M) — handles the transfer of files by uucico over TCP/IP
        connections
    uudemon.admin(1M) — mails current uucp work status to the uucp
         administrator
    uudemon.cleanup(1M) — cleans up files in the uucp spool directory
    uudemon.hour(1M) — processes spooled uucp requests
    uudemon.poll(1M) — sets up polling for selected systems
    uusched(1M) — schedules uucp file transfers
    uuxat(1M) — handles requests from remote systems to run commands
unmounting file systems
    umount(2) — unmount a file system
    unmount(2) — remove a file system
    umount(3) — unmounts a file system
updaters
    make(1) — maintains, updates, and regenerates groups of files
    rdist(1) — distributes remote files
    sync(1) — updates the superblock
    touch(1) — updates access and modification times of a file
    updater(1) — updates files between two machines
    badblk(1M) — sets or updates bad block information
    dp(1M) — performs disk partitioning
    eu(1M) — updates autorecovery files
    eupdate(1M) — updates important files for autorecovery purposes
    yppush(1M) — propagates changed Network Information Service (NIS)
        maps
    sync(2) — update superblock
    vppasswd(3N) — updates a user password on the Network Information
        Service (NIS) master server
    bzb(4) — Block Zero Block file format
user accounts
    chfn(1) — changes the real-name field of your password file entry for use
        by finger
    chsh(1) — changes the default login shell
    finger(1) — displays information about the users on a system
    fingerd(1M) — handles requests from remote systems for user
        information from finger
user IDs
    setuid(2) — set user and group ID
    getpw(3C) — gets a name from UID
user interface, choosing
    CommandShell(1) — manages command-interpretation windows and
        moderates access to the A/UX console window
    chsh(1) — changes the default login shell
    Login(1M) — logs you in to A/UX by using a graphical user interface
```

```
user interface, Macintosh
    cmdo(1) — builds command lines interactively
    macquery(1M) — posts a Macintosh alert box to query the user
user names
    cuserid(3P) — gets a character login name of the user
    cuserid(3S) — gets a character login name of the user
users, general
    finger(1) — displays information about the users on a system
    groups(1) — displays group memberships
    id(1) — displays user and group IDs and names
    last(1) — displays login and logout times for each user of the system
    logname(1) — gets the login name
    rusers(1N) — produces a login list for local machines (RPC version)
    rwho(1N) — displays a list of the active users from all of the systems on
         the local network
    su(1) — substitutes user ID
    talk(1N) — talks to another user via the terminal
    users(1) — reports a list of the users who are logged on to the system
    w(1) — displays a summary of the current system activity
    who(1) — reports users who are currently logged in to the system
    whoami(1) — prints effective current user ID
    adduser(1M) — adds a user account
    fingerd(1M) — handles requests from remote systems for user
         information from finger
    mkslipuser(1M) — creates or updates the Compressed Serial
         Line/Internet Protocol (CSL/IP) database
    rusersd(1M) — rusers invokes a server for users
    rwall(1M) — writes to all users over a network
    rwalld(1M) — invokes the network rwall server
    talkd(1M) — invokes the remote user communication server
    wall(1M) — writes to all users
    whodo(1M) — informs you of the current system activity
    getuid(2) — get real and effective user IDs and group IDs
    setreuid(2) — set real and effective user ID
    setsid(2P) — create session and set process group ID
    setuid(2) — set user and group ID
    cuserid(3P) — gets a character login name of the user
    cuserid(3S) — gets a character login name of the user
    logname(3X) — return login name of user
    rnusers(3N) — return information about users on remote machines
    ttyslot(3C) — finds the slot in the utmp file of the current user
    slip.user(4) — database of available Compressed Serial Line/Internet
         Protocol (CSL/IP) connections
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UTMP file
    getut(3C) — access a utmp file entry
    ttyslot(3C) — finds the slot in the utmp file of the current user
    utmp(4) — utmp and wtmp entry formats
UUCP
    uucp(1C) — copies files from one system to another system
    uuencode(1C) — encode and decode a binary file
    uuglist(1C) — displays the service grades that are available on your
    uulog(1C) — displays information about uucp file transfers
    uuname(1C) — displays the names of systems to which uucp and cu can
    uusend(1C) — sends a file to a remote host
    uustat(1C) — controls uucp jobs and provides status information
    uuto(1C) — provide an easy interface to the uucp command, using the
         public directories
    uux(1C) — runs a command on a remote system
    Uutry(1M) — contacts a remote system with debugging on
    uucheck(1M) — checks the uucp directories and files
    uucico(1M) — transfers files as specified by uucp work files
    uucleanup(1M) — removes old files from the uucp spool directory
    uucpd(1M) — handles the transfer of files by uucico over TCP/IP
         connections
    uudemon.admin(1M) — mails current uucp work status to the uucp
         administrator
    uudemon.cleanup(1M) — cleans up files in the uucp spool directory
    uudemon.hour(1M) — processes spooled uucp requests
    uudemon.pol1(1M) — sets up polling for selected systems
    uusched(1M) — schedules uucp file transfers
    uuxqt(1M) — handles requests from remote systems to run commands
variables, system
    kconfig(1M) — tunes kernel parameters for work-load optimization
    sysconf(3P) — gets configurable system variables
version control
    admin(1) — creates and administers SCCS files
    cdc(1) — changes the delta commentary of an SCCS delta
    ci(1) — checks in RCS revisions
    co(1) — checks out RCS revisions
    comb(1) — combines SCCS deltas
    delta(1) — makes a delta (change) to an SCCS file
    get(1) — gets a version of an SCCS file
    help(1) — provides help information about SCCS commands and
         messages
    prs(1) — displays information about an SCCS file
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rcs(1) — creates new RCS files or changes attributes of existing RCS files
    rcsdiff(1) — compares RCS revisions
    rcsintro(1) — introduces RCS commands
    rcsmerge(1) — merges two versions of an RCS file
    rlog(1) — displays log messages and other information about RCS files
    rmdel(1) — removes a delta from an SCCS file
    sact(1) — displays who has checked a Source Code Control System
         (SCCS) file out for editing
    sccs(1) — performs SCCS subsystem commands
    sccsdiff(1) — compares two versions of an SCCS file
    unget(1) — undoes a previous get of an SCCS file
    val(1) — validate SCCS file
    vc(1) — manipulates version control information inside a data stream
    version(1) — reports version number of files
    what (1) — reports identification information for a file
    sccstorcs(1M) — builds an RCS file from an SCCS file
version control, RCS
    ci(1) — checks in RCS revisions
    co(1) — checks out RCS revisions
    rcs(1) — creates new RCS files or changes attributes of existing RCS files
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view graphs
    mvt(1) — typeset documents that contain troff and mm or mv macro-
         formatting requests
    mv(5) — a troff macro package for typesetting viewgraphs and slides
windows
    CommandShell(1) — manages command-interpretation windows and
         moderates access to the A/UX console window
word breaks
    hyphen(1) — finds hyphenated words
word counting
    wc(1) — counts characters, words, and lines in a file
worms
    worm(6) — plays the game of growing worm
    worms(6) — plays the game of worms
writing
    write(2) — write on a file
wumpus
    wump(6) — plays the game of hunt-the-wumpus
Xerox 1700 terminal
    450(1) — filters text containing printer control sequences for the DASI
         terminal
yes (reply to queries)
    yes(1) — generates y entries in response to requests for input
```