

The ABC's of UNIX

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A

is for

awk

which runs like a snail

A is for awk, which runs like a snail.

awk is:

- ▶ Aho Weinberger Kernighan
- ▶ a text processing utility
- ▶ See also: sed, perl, python

Some other "A" programs:

- `at` schedule jobs *at* a given time
- `alsa` sound system

B

is for

biff

which reads all your mail

A is for awk, which runs like a snail, and **B is for biff, which reads all your mail.**

biff is:

- ▶ an email notification program
- ▶ traditionally a command line program
- ▶ the original “You’ve got mail”
- ▶ possibly named after a dog

Some other “B” programs:

- `bc` a command line calculator
- `bash` the standard GNU shell
- `bison` parser generator

C

is for

CC

as hackers recall

C is for cc, as hackers recall.

cc is:

- ▶ the C Compiler
- ▶ one step in the compile process
- ▶ GCC is the most common these days
- ▶ See also: cpp, as, ld

Some other “C” programs:

- `cd` change directory (shell command)
- `cat` “concatenate” files
- `cron` run scheduled jobs

D

is for

dd

the command that does all

C is for cc, as hackers recall, while
D is for dd, the command that does all.

dd is:

- ▶ binary file copy utility
- ▶ can skip, seek, copy by blocks, swap bytes, convert encodings, etc

Some other “D” programs:

- `dc` a reverse polish calculator (*andy's favorite!*)
- `ddd` a fancy C debugger
- `dbus` Don't make a fuss, get on D-Bus!

E

is for

emacs

which rebinds your keys

E is for emacs, which rebinds your keys.

emacs is:

- ▶ a text editor
- ▶ extremely configurable
- ▶ one of the first “free software” programs

Some other “E” programs:

`eclipse` A more modern IDE

`ed` the standard editor

F

is for

fsck

which rebuilds your trees

E is for emacs, which rebinds your keys, and
F is for fsck, which rebuilds your trees.

fsck is:

- ▶ the “file system checker”
- ▶ used to repair broken file systems
- ▶ not used as much on journalizing filesystems

Some other “F” programs:

fortune where I learned my ABC's!

find search for files

fdisk format partition table

ftrace trace kernel code calls

G

is for

grep

a clever detective

G is for grep, a clever detective.

grep is:

- ▶ a text search utility
- ▶ named after g/re/p from old UNIX editors

Some other “G” programs:

- git** version control
- gimp** powerful image editor
- gpg** public key encryption
- g*** GNU/GTK/Gnome programs

H

is for

halt

which may seem defective

G is for grep, a clever detective, while
H is for halt, which may seem defective.

halt is:

- ▶ a way to shutdown your computer
- ▶ can call other command such as kexec
- ▶ see also: shutdown, reboot, init, telinit

Some other "H" programs:

`head` print first few lines of files

`hexdump` convert binary to hexadecimal

`htop` command line process monitor

I

is for

indent

which rarely amuses

I is for indent, which rarely amuses.

indent is:

- ▶ a source code formatter
- ▶ used to convert brace styles, indentation, etc

Some other "I" programs:

`info` GNU help browser

`inkscape` SVG image editor

`irssi` IRC client

`ip/iw` configure network interfaces

`iptables` configure firewalls

J

is for

join

which nobody uses

I is for indent, which rarely amuses, and
J is for join, which nobody uses.

join is:

- ▶ a relational operator
- ▶ matches lines in two different files
- ▶ see also: cut, paste, cat

Some other “J” programs:

`jobs` show background processes

`j*` java programs

K

is for

kill

which makes you the boss

K is for kill, which makes you the boss.

kill is:

- ▶ the UNIX Task Manager
- ▶ can signal processes
- ▶ see also: pkill, killall

Some other "K" programs:

`keymap` linux keyboard mappings

L

is for

lex

which is missing from DOS

K is for kill, which makes you the boss, while
L is for lex, which is missing from DOS.

lex is:

- ▶ a lexical analyser or “lexer”
- ▶ often used to create programming languages
- ▶ See also YACC/bison/flex

Some other “L” programs:

latex you're looking at it!

lynx and friends

libreoffice office software

M

is for

more

from which less was begot

M is for more, from which less was begot.

more is:

- ▶ a paginator
- ▶ prints out a file or command output page by page
- ▶ less is a more advanced version which can scroll up

Some other “M” programs:

most yet another paginator

mkfs format filesystems

mpd music player daemon

make the standard build system

man manual pages (better than info!)

N

is for

nice

which it really is not

M is for more, from which less was begot, and
N is for nice, which it really is not.

nice is:

- ▶ used to control process priority
- ▶ only for the default process scheduler
- ▶ see also: ionice, chrt, taskset

Some other "N" programs:

`ntp` syncs your clocks

`nmap` port scanner

`netstat` show network connections

O

is for

od

which prints out things nice

O is for od, which prints out things nice.

od is:

- ▶ “octal dump”
- ▶ can also dump out hex, binary, floating point, etc

Some other “O” programs:

`objdump` disassembler and more

P

is for

passwd

which reads in strings twice

O is for *od*, which prints out things nice, while
P is for **passwd**, which reads in strings twice.

passwd is:

- ▶ used to change your login password
- ▶ see also: shadow, pam, getent, htpasswd

Some other “P” programs:

patch apply source code patches

ps/pstree print running processes

ping pong!

pv pipe viewer

Q

is for

quota

a Berkeley-type fable

Q is for quota, a Berkeley-type fable.

quota is:

- ▶ used to limit disk usage
- ▶ see also: limit, ulimit
- ▶ (I've never actually used it)

Some other "Q" programs:

qemu VM / emulator

R

is for

ranlib

for sorting ar table

Q is for quota, a Berkeley-type fable, and
R is for ranlib, for sorting ar table.

ranlib is:

- ▶ generates an index for an archive
- ▶ used during the compile process

Some other “R” programs:

`rename` rename things

`rsync` copy files between computers

`rtorrent` bit torrent client

S

is for

spell

which attempts to belittle

S is for spell, which attempts to belittle.

spell is:

- ▶ a spell checker
- ▶ common version include: ispell, aspell (GNU), myspell/hunspell (OpenOffice)

Some other "S" programs:

ssh remote login

sed the stream editor

su/sudo also makes you the boss

screen terminal multiplexer

strace trace system calls

T

is for

true

which does very little

S is for spell, which attempts to belittle, while
T is for true, which does very little.

true is:

- ▶ very simple
- ▶ just returns “true”
- ▶ .. unless you're talking about GNU true
- ▶ see also: false

Some other “T” programs:

tex you're looking at it!

tar tape archiver

tac like cat, but backwards

U

is for

uniq

which is used after sort

U is for uniq, which is used after sort.

uniq is:

- ▶ used to remove duplicate lines

Some other “U” programs:

`uname` show kernel version

`un*` unzip/unxz/unshare/umount

V

is for

vi

which is hard to abort

U is for uniq, which is used after sort, and
V is for vi, which is hard to abort.

vi is:

- ▶ a text editor
- ▶ also vim, elvis, vile, nvi, busybox

Some other “V” programs:

`vlc` media player

`vnc` remote desktop

W

is for

whoami

which tells you your name

W is for whoami, which tells you your name.

whoami is:

- ▶ used for scripting
- ▶ prints your username

Some other "W" programs:

- `wireshark` network analyzer
- `wine` run windows programs
- `wc` count words or lines
- `watch` watch watch watch
- `wget` download stuff

X

is, well

X

of dubious fame

W is for whoami, which tells you your name, while
X is, well, X, of dubious fame.

X is:

- ▶ the display server
- ▶ used for (almost) all graphical interfaces
- ▶ “the largest program that doesn’t actually do anything” -somebody
- ▶ see also: wayland, mir, directfb

Some other “X” programs:

send stuff to | xargs

xournal annotate pdfs

xxd another hex dumper

Y

is for

yes

which makes an impression

Y is for yes, which makes an impression.

yes is:

- ▶ used to repeat a line
- ▶ answers “yes” to any prompt

Some other “Y” programs:

`yacc` yet another compiler compiler

`youtube-dl` download music/videos

Z

is for

zcat

which handles compression

Y is for yes, which makes an impression, and
Z is for zcat, which handles compression.

zcat is:

- ▶ a like cat for compressed files
- ▶ used for gzip files (Lempel-Ziv coding - LZ77)
- ▶ see also: bzip2, lzma, lzop, zx

Some other “Z” programs:

zsh bash with more completion

zathura pdf viewer

zenity command like dialogs