1 System information and administration

`blkid`	List the block devices, and its ids
`cfdisk`, `fdisk`	Alter the partition table
`cpu-info`, `cpuid`, `lscpu`	List detailed cpu information
`df`, `dfc`, `duf`	Show available disk space
`du`, `duf`	Show disk space usage
`free`	List both available and used memory, and SWAP space
`halt`, `poweroff`, `shutdown`	Stop the system
`journalctl`	Query the systemd journal
`lsblk`	Display information about the system's block devices
`lsdev`, `lshw`	Display information about installed hardware
`lsof`	List open files
`lspci`	List all pci devices
`lsusb`	List all usb devices
`mailq`	Listing of the contents of the mail queue on the standard output
`reboot`	Reboot the system
`systemctl`	Reboot the system
`systemd-cat`	Connect a pipeline or program's output with the journal
`uname`	Display the Linux kernel that is in use
`uptime`	Display the time the system is already up and running

2 Find files and directories

`find`	Find files, and directories by various criteria
`locate`	Find files, and directories by name based on the locate database
`updatedb`	Initialize, and update the locate database

3 File and directory operations

`cd`	Change to a directory
`cp`	Copy a file
`file`	Identify the file type
`ln`	Create a link
`ls`	List the contents of a directory
`mkdir`	Create a directory
`mmv`	Rename, or move multiple files, or directories
`mv`	Rename, or move a single file, or directory
`pwd`	Print the current working directory
`rm`	Remove one or more files, or directories
`rmdir`	Remove an empty directory
`touch`	Create an empty file, or update the timestamp of an existing file
`umask`	Set file mode creation mask

4 Package management (selection)

`apt`, `apt-get`, `aptitude`, `synaptic`	Install, update, and remove software packages [1]
`apt-cache`	Manage, and query the package cache [1]
`dpkg`	Install, update, and remove software packages [1]
`dpkg-reconfigur`	Reconfigure package configuration [1]
`rpm`, `yum`	Install, update, and remove software packages [2]

Notes:
[1]: Debian GNU/Linux, Ubuntu, and Linux Mint
[2]: RedHat Linux, Fedora, and OpenSuse

5 Using pagers

`less`, `more`	Display data page by page
`most`	Display data page by page, and in multiple windows

6 Network commands

`dhclient`	Request a dynamic IP address
`dig`, `host`	DNS lookup utility
`hostname`	Display the system's hostname
`ifconfig`, `iwconfig`	Configure network interfaces, and display interface configuration (deprecated)
`ifup`	Enable a network interface
`ip`	Configure network interfaces, and display interface configuration
`ifdown`	Disable a network interface
`iwlist`	List available wireless networks
`nc`, `netcat`	TCP/IP swiss army knife
`netstat`, `ss`	Display network statistics
`nslookup`	Lookup name service entries
`ping`, `ping6`	Send ICMP package to a host
`route`	Display routing table
`tcpdump`	Dump traffic on a network
`traceroute`, `traceroute6`	Print the route packets trace to network host
`wget`	Non-interactive data transfer

7 Secure data transfer

`rsync`, `scp`	Synchronize data locally, or remotely using a secure, encrypted channel
`ssh`	Connect to a remote system using a secure, encrypted channel
`ssh-copy-id`	Transfer an SSH public key to a remote system for password-less authentification
`ssh-keygen`	Generate an SSH key pair for password-less authentification

8 Users, groups, and access control

`addgroup`	Add a new group [1]
`adduser`	Add a new user [1]
`chage`	Modify the duration a user account is valid
`chgrp`	Modify the group of a file, or directory
`chmod`	Modify the access rights of a file, or directory
`chown`	Modify the owner of a file, or directory
`delgroup`	Remove an existing group [1]
`deluser`	Remove an existing user [1]
`getfacl`	Display ACL permissions of a file, or directory
`getent`	Lookup user information in local databases
`groupadd`	Add a new group [2]
`groupdel`	Remove an existing group [2]
`groupmod`	Modify an existing group [2]
`groups`	Display the groups a user belongs to
`id`	Display user information
`last`	Show last login time for a user
`passwd`, `usermod`	Modify password for a user account
`pwgen`	Generate a random password
`setfacl`	Set ACL permissions of a file, or directory
`su`	Switch to a different user account
`sudo`	Run command as administrative user
`useradd`	Add a new user [2]
`userdel`	Remove an existing user [2]
`usermod`	Modify an existing user [2]
`users`, `w`, `who`	List logged-in users
`wall`	Write a message to all users currently logged in
`whoami`	Display current user name

Notes:
[1] High-level tool [2] Low-level tool

9 Getting help

apropos	Display a short help text explaining the given command
info	Get help using the GNU Info system
man	Display an extended help text explaining the given command
manpath	Manage the path for manual pages
whatis	Looks up the index database for short help texts explaining the given command

10 Processes and job control

bg	Send process to the background
fg	Bring a process into the foreground
htop, top	A process monitor
jobs	List running jobs
kill	Send a signal to a process
killall	Send a signal to a number of processes
nice, renice	Modify the nice level of a process
pgrep	Find a process by its name, or by Regular Expression
pkill	Look up or signal processes based on name and other attributes
ps	List running processes
pstree	Display processes as a tree structure
pwdx	Display the working directory of a process
sleep	Pause the execution of commands
watch	Execute a program periodically, showing output fullscreen

11 Text and data stream processing

awk	Alter, or extract data from text files preferably by column
cat	Output a file from top to bottom
cmp, diff	Compare two files, and show the differences between them
colrm	Remove a column from a file
column	Display data column-wise
cut	Extract data from text files by column
egrep, fgrep, grep	Filter text files by pattern line-wise
head	Print a specified number of lines beginning at the top of a file
hexdump	Output data as hexadecimal characters
nl	Output a file, and add line numbers
paste	Combine single files into one
rev	Output text in reverse order
sed	Modify a file line-wise
sort	Sort a file
split	Split a file based on conditions
tac	Output a file from bottom to top
tail	Print a specified number of lines beginning at the bottom of a file
tee	Read from stdin, and print to both a file, and stdout
tr	Replace text in a file
uniq	Report, or remove duplicate lines
wc	Count lines, words, and characters of a file

12 Dealing with log files

logger	A shell command interface to the syslog system log module
logrotate	Rotates, compresses, and mails system logs

13 Handling file systems

e2fsck, fsck	File system check
findmnt	List, and search for mounted file systems
mkfs	Create a file system
mkswap	Prepare a partition for SWAP usage
mount	Mount a file system
swapoff	Disable a SWAP partition
swapon	Ensable a SWAP partition
tune2fs	Modify existing file system
umount	Unmount a file system

14 Working with terminals and shells, adjust the working environment

alias	List, or alter aliases for commmands
clear	Clear the screen
echo	Output text on the screen
env	Display the environment variables
exit, logout	Quit the current shell session
fc	Modify the command history
history	Display the previously used commands
screen, tmux	A terminal multiplexer
set	Enable, or change a run-time parameter
time	Measure the execution time of a command
type	Identify command type
unalias	Remove an alias for a command
unset	Remove, or disable a runtime parameter
whatis	Lookup the index database for command descriptions
whereis	Lookup the binary files, source code files, and manual pages for a command
which	Identify which command will be run by the shell
xargs	Build and execute command lines from standard input

15 Handling the Linux kernel

dmesg	Display, and control the kernel ring buffer
insmod	Insert (activate) a kernel module into the currently running Linux kernel
lsmod	List the kernel modules from the currently running Linux kernel
modprobe	Try to insert (activate) a kernel module into the currently running Linux kernel
rmmode	Remove (deactivate) a kernel module from the currently running Linux kernel
uname	Display information about the currently running Linux kernel

16 Printing

lp, lpr	Print files, or change an existing printing job
lpc	Manage printers
lpq	Display the contents of the printer queue
lprm	Remove an existing job from the printer queue

17 System time, date, calendar, and locales

cal, ncal	Display a calendar
date	Display a date in various formats
hwclock	Manage both the hardware, and the system clock
locale	Display information about the current locale
ntpdate, ntpsec-ntpdate	Retrieve the time information from an NTP server
timedatectl	Control the system time and date

18 Archives and data compression

`bunzip2`	Unpack a compressed file (bzip2 format)
`bzcat`	Output file content to `stdout` from a compressed file (bzip2 format)
`bzegrep,` `bzfgrep,` `bzgrep`	Search in a bz-compressed file
`bzip2`	Compress a file (bzip2 format)
`gunzip`	Unpack a compressed file (gzip format)
`gzip`	Compress a file (gzip format)
`tar`	Create, and manage a tape archive (tar file)
`unzip`	Unpack a compressed file (zip format)
`xz`	Compress a file (xz format)
`xzcat`	Output file content to `stdout` from a compressed file (xz format)
`xzegrep,` `xzfgrep,` `xzgrep`	Search in a xz-compressed file
`zip`	Compress a file (zip format)
`zcat`	Output file content to `stdout` from a compressed file (zip format)
`zegrep, zfgrep,` `zgrep`	Search in a zip-compressed file

19 System libraries

`ldd`	Print shared library dependencies
`ldconfig`	Configure dynamic linker run-time bindings

Notes