

# Top 300 Commands in Linux



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## File and Directory Commands (1–60)

1. **ls** – List directory contents.
2. **ls -l** – List with detailed info.
3. **ls -a** – List including hidden files.
4. **pwd** – Print current directory path.
5. **cd** – Change directory.
6. **cd ..** – Move up one directory.
7. **mkdir** – Create a directory.
8. **rmdir** – Remove an empty directory.
9. **rm** – Remove a file.
10. **rm -rf** – Recursively remove directory.
11. **cp** – Copy file or directory.
12. **cp -r** – Recursively copy directory.
13. **mv** – Move or rename file/directory.
14. **touch** – Create an empty file or update timestamp.
15. **cat** – View file contents.
16. **tac** – View file contents in reverse.
17. **more** – View text one page at a time.
18. **less** – View text with paging controls.
19. **head** – View beginning of file.
20. **tail** – View end of file.
21. **tail -f** – Follow file real-time.
22. **stat** – Show file status.
23. **file** – Determine file type.
24. **basename** – Strip directory to show filename.
25. **dirname** – Strip last component of file path.



26. **ln** – Create links between files.
27. **chmod** – Change file permissions.
28. **chown** – Change file owner.
29. **chgrp** – Change group ownership.
30. **umask** – Set default file creation permissions.
31. **find** – Search for files.
32. **locate** – Find files using database index.
33. **updatedb** – Update locate database.
34. **grep** – Search text using patterns.
35. **egrep** – Extended grep with additional options.
36. **fgrep** – Fixed pattern search.
37. **diff** – Compare files line by line.
38. **diff3** – Compare three files.
39. **cmp** – Compare two files byte by byte.
40. **comm** – Compare sorted files line by line.
41. **tee** – Read input and write to file and stdout.
42. **wc** – Count lines, words, characters.
43. **cut** – Cut sections from each line.
44. **sort** – Sort lines of text.
45. **uniq** – Report unique lines.
46. **nl** – Number lines in file.
47. **join** – Join lines of two files.
48. **split** – Split file into parts.
49. **csplit** – Split file by context.
50. **head -n** – Output first n lines.
51. **tail -n** – Output last n lines.
52. **strings** – Print text strings in binary.



53. stat – Display detailed file info.
  54. watch – Execute a program periodically.
  55. tree – Display directory structure as a tree.
  56. rename – Rename multiple files.
  57. xdg-open – Open a file with default app.
  58. filefrag – Report file fragmentation.
  59. lsblk – List block devices.
  60. lsof – List open files.
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## Text Editing Commands (61–100)

61. nano – Simple text editor.
62. vi – Interactive text editor.
63. vim – Improved vi editor.
64. emacs – Powerful full-featured editor.
65. ed – Line editor.
66. sed – Stream editor for filtering text.
67. awk – Text processing and reporting.
68. printf – Print formatted text.
69. echo – Display a line of text.
70. cat > – Create file with redirected input.
71. crontab -e – Edit cron jobs.
72. alias – Create command shortcut.
73. unalias – Remove command alias.
74. history – Display command history.
75. fc – Fix command from history.
76. script – Record terminal session.
77. edlin – Legacy line editor.



78. **mg** – Lightweight Emacs-like editor.
79. **joe** – Text editor with WordStar keybindings.
80. **pico** – Simple text editor.
81. **col** – Filter reverse line feeds.
82. **colrm** – Remove selected columns.
83. **expand** – Convert tabs to spaces.
84. **unexpand** – Convert spaces to tabs.
85. **recode** – Convert files between character sets.
86. **fmt** – Simple text formatter.
87. **spell** – Spell check text file.
88. **ispell** – Interactive spell checker.
89. **diffstat** – Produce histogram from diff output.
90. **filterdiff** – Extract specific parts from diff.
91. **patch** – Apply diff file to original.
92. **edlin** – Obsolete line editor.
93. **rpl** – Replace strings in files.
94. **tput** – Terminal capabilities.
95. **colcrt** – Filter for CRT display.
96. **colout** – Colorize parts of text.
97. **fmt** – Format text paragraphs.
98. **ptx** – Produce permuted index.
99. **sed -i** – Edit file in place.
100. **awk '{print \$1}'** – Print first column.



## System Information Commands (101–140)

101. **uname** – Show system information.
102. **uname -a** – All available system info.
103. **hostname** – Show or set system host name.
104. **hostnamectl** – Control host name settings.
105. **uptime** – Show system uptime.
106. **top** – Real-time process monitor.
107. **htop** – Improved top utility.
108. **dmesg** – Kernel ring buffer messages.
109. **lsusb** – List USB devices.
110. **lspci** – List PCI devices.
111. **lscpu** – Display CPU architecture info.
112. **free** – Show memory usage.
113. **vmstat** – Report virtual memory statistics.
114. **iostat** – CPU and I/O statistics.
115. **mpstat** – CPU usage statistics.
116. **ps** – Report process status.
117. **pidof** – Find process IDs.
118. **pgrep** – Search for process by name.
119. **pmap** – Process memory map.
120. **smem** – Memory report per process.
121. **lsmod** – List loaded kernel modules.
122. **modinfo** – Display module info.
123. **uname -r** – Kernel release.
124. **cat /proc/cpuinfo** – CPU details.
125. **cat /proc/meminfo** – Memory details.
126. **cat /proc/version** – Kernel version info.



127. **inxi** – Full system overview.
128. **hostname -I** – IP addresses.
129. **timedatectl** – Time and date configuration.
130. **systemctl status** – Show systemd status.
131. **journalctl** – Query system logs.
132. **last** – Show last logins.
133. **who** – Show logged-in users.
134. **w** – Who and what they are doing.
135. **watch -n** – Run command repeatedly.
136. **neofetch** – Show system information.
137. **screenfetch** – Another system info tool.
138. **lsb\_release** – Distribution info.
139. **uname -m** – Hardware architecture.
140. **cat /etc/os-release** – OS release info.

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## User and Permission Management (141–180)

141. **useradd** – Add new user.
142. **adduser** – Friendly user creation.
143. **userdel** – Delete user.
144. **usermod** – Modify user account.
145. **passwd** – Change user password.
146. **groups** – List user groups.
147. **groupadd** – Add new group.
148. **groupdel** – Delete group.
149. **groupmod** – Modify group.
150. **gpasswd** – Administer group passwords.
151. **chage** – Change user password expiry.



152. **id** – Print user identity.
153. **whoami** – Show effective username.
154. **su** – Switch user.
155. **sudo** – Execute command as superuser.
156. **visudo** – Safely edit sudoers file.
157. **newgrp** – Log in to new group.
158. **getent** – Get entries from system databases.
159. **loginctl** – Inspect/manage logins.
160. **chmod** – Change file permissions.
161. **chown** – Change file owner.
162. **chgrp** – Change file group.
163. **setfacl** – Set file ACL.
164. **getfacl** – Get file ACL.
165. **umask** – Default file permission mask.
166. **pam\_tally2** – Show failed login attempts.
167. **faillog** – Login failure log tool.
168. **ssh-keygen** – Generate SSH keys.
169. **ssh-copy-id** – Copy SSH key to remote host.
170. **ssh** – Secure shell remote login.
171. **scp** – Secure copy files.
172. **sftp** – Secure FTP.
173. **chsh** – Change login shell.
174. **who** – Logged in users.
175. **w** – Who is logged in with activity.
176. **uptime** – System uptime summary.
177. **reset** – Reset terminal settings.
178. **tty** – Print terminal name.

179. **mesg** – Control terminal write access.
  180. **write** – Write message to another user.
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## **Networking Commands (181–220)**

181. **ip** – Show / manipulate routing, devices, policy routing and tunnels.
182. **ifconfig** – Configure network interfaces (older tool).
183. **ip addr** – Show IP addresses.
184. **ip link** – Show / set network link info.
185. **ip route** – Show / manipulate routing table.
186. **ping** – Send ICMP ECHO\_REQUEST to network hosts.
187. **tracepath** – Trace path to a host (non-privileged).
188. **traceroute** – Trace route packets take to network host.
189. **mtr** – Combines ping and traceroute.
190. **nslookup** – Query Internet name servers.
191. **dig** – DNS lookup utility.
192. **host** – DNS lookup command.
193. **netstat** – Networking statistics (older tool).
194. **ss** – Better netstat replacement showing socket stats.
195. **nmcli** – Control NetworkManager from command line.
196. **ethtool** – Query / control network driver and hardware settings.
197. **iwconfig** – Configure wireless network interfaces.
198. **iwlist** – Get more detailed wireless info.
199. **wpa\_cli** – Control WPA supplicant.
200. **arp** – Display / manipulate ARP cache.
201. **route** – Show / manipulate IP routing table (older).
202. **telnet** – User interface to TELNET protocol (not secure).



- 203. **ftp** – File Transfer Protocol client.
- 204. **scp** – Secure copy files over SSH.
- 205. **sftp** – SSH File Transfer Protocol.
- 206. **rsync** – Remote file and directory synchronization.
- 207. **curl** – Transfer data with URLs.
- 208. **wget** – Non-interactive network downloader.
- 209. **nc** – Netcat, read and write network connections.
- 210. **ethtool** – Network device settings.
- 211. **hostname** – Show / set system hostname.
- 212. **dig +short** – Short DNS responses.
- 213. **ip neigh** – Show / manipulate ARP table.
- 214. **telnet localhost port** – Test local ports.
- 215. **whois** – Query domain registration info.
- 216. **arping** – Send ARP requests to hosts.
- 217. **socat** – Multipurpose relay tool.
- 218. **nmap** – Network exploration and security auditing.
- 219. **tshark** – Terminal capture tool (Wireshark CLI).
- 220. **tcpdump** – Packet analyzer.

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## Package Management Commands (221–250)

- 221. **apt update** – Update package index (Debian/Ubuntu).
- 222. **apt upgrade** – Upgrade all packages.
- 223. **apt install** – Install package.
- 224. **apt remove** – Remove installed package.
- 225. **apt purge** – Remove including config files.
- 226. **apt autoremove** – Remove unused packages.
- 227. **apt search** – Search package in repos.



228. **apt show** – Display package info.
229. **dpkg -i** – Install .deb package.
230. **dpkg -l** – List installed packages.
231. **dnf install** – Install package (Fedora).
232. **dnf remove** – Remove package (Fedora).
233. **dnf update** – Update packages (Fedora).
234. **yum install** – Install package (older RHEL/CentOS).
235. **yum update** – Update system packages.
236. **rpm -qa** – Query all installed RPMs.
237. **rpm -ivh** – Install RPM package.
238. **snap install** – Install snap package.
239. **snap list** – List installed snaps.
240. **flatpak install** – Install Flatpak app.
241. **flatpak list** – List installed Flatpak apps.
242. **zypper install** – Install package (openSUSE).
243. **zypper update** – Update packages (openSUSE).
244. **pacman -S** – Install package (Arch).
245. **pacman -Ss** – Search package (Arch).
246. **pacman -R** – Remove package (Arch).
247. **pacman -Syu** – System update (Arch).
248. **apk add** – Install package (Alpine).
249. **apk update** – Update index (Alpine).
250. **apk upgrade** – Upgrade packages (Alpine).

## Process and Job Control (251–280)

251. **jobs** – List jobs running in current shell.
252. **bg** – Send job to background.
253. **fg** – Bring job to foreground.
254. **kill** – Send signal to process.
255. **killall** – Kill processes by name.
256. **nice** – Run program with modified scheduling priority.
257. **renice** – Change priority of running process.
258. **daemonize** – Run program as daemon.
259. **nohup** – Run command immune to hangups.
260. **disown** – Remove job from shell's job table.
261. **systemctl** – Control systemd system and service manager.
262. **service** – Run a SysV init script.
263. **journalctl -u** – Show logs for service.
264. **at** – Schedule commands to run once.
265. **batch** – Schedule jobs with load threshold.
266. **crontab -l** – List cron jobs.
267. **cron** – Daemon to execute scheduled tasks.
268. **pstree** – Display process tree.
269. **pgrep -l** – List processes matching patterns.
270. **pkill** – Kill process by name.
271. **timeout** – Run a command with timeout.
272. **watch** – Execute command repeatedly.
273. **strace** – Trace system calls.
274. **ltrace** – Trace library calls.
275. **perf** – Performance analysis tools.
276. **valgrind** – Debug and profile programs.



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- 277. **systemd-analyze** – Analyze system boot performance.
  - 278. **cgroups** – Control groups resource management.
  - 279. **taskset** – Set CPU affinity for a process.
  - 280. **ionice** – Set I/O scheduling class.
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## Filesystem & Disk Management (281–300)

- 281. **mount** – Mount filesystem.
- 282. **umount** – Unmount filesystem.
- 283. **df** – Show disk space usage.
- 284. **du** – Show directory space usage.
- 285. **fdisk** – Partition table manipulator.
- 286. **cfdisk** – Curses based partition tool.
- 287. **parted** – Partition manipulation.
- 288. **mkfs** – Build a Linux file system.
- 289. **fsck** – File system consistency check.
- 290. **blkid** – Locate/print block device attributes.
- 291. **resize2fs** – Resize ext2/ext3/ext4 filesystem.
- 292. **e2label** – Change ext2/ext3/ext4 filesystem label.
- 293. **losetup** – Associate loop devices.
- 294. **dd** – Convert and copy a file at low level.
- 295. **pv** – Monitor data through pipeline.
- 296. **badblocks** – Search for bad blocks on device.
- 297. **mkfs.vfat** – Create FAT filesystem.
- 298. **mount -t** – Mount with specified filesystem type.
- 299. **tune2fs** – Adjust ext2/ext3/ext4 filesystem parameters.
- 300. **quota** – Display disk usage and limits.