

Essential Linux commands Cheat Sheet

♦ File & Directory Navigation

- `ls -l` : Detailed list of files and directories
- `cd <directory>` : Change directory
- `pwd` : Print working directory
- `find <directory> -name <filename>` : Search for files
- `less <file>` : View file content one page at a time
- `head -n <number> <file>` : View the first `n` lines of a file
- `tail -n <number> <file>` : View the last `n` lines of a file
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♦ File Operations

- `cat <file>` : View file content in one go
- `touch <file>` : Create a new file or update its timestamp
- `cp <source> <destination>` : Copy a file
- `mv <source> <destination>` : Move or rename a file
- `rm -r <directory>` : Remove a directory and its contents
- `mkdir -p <directory/subdirectory>` : Create directories with subdirectories
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♦ Permissions & Ownership

- `chmod <permissions> <file>` : Change file permissions
- `chown <owner>:<group> <file>` : Change file owner and group
- `chmod +x <file>` : Make a file executable
- `umask <permissions>` : Set default file permissions for newly created files

♦ Text Operations

- `cat <file>` : View file content
- `grep <pattern> <file>` : Search for a pattern in a file
- `nano <file>` : Edit a file using Nano editor
- `tail -f <file>` : View the last lines of a file and follow updates
- `sed 's/old/new/g' <file>` : Replace text in a file using sed

◆ System Monitoring

- `top` : Display real-time system processes
- `htop` : Interactive process viewer (if installed)
- `df -h` : Check disk space usage
- `du -sh <directory>` : Show directory size
- `free -m` : Display memory usage
- `uptime` : Show how long the system has been running
- `iostat` : Check disk I/O statistics

◆ Networking

- `ping <host>` : Check network connectivity
- `ifconfig` : Display network interfaces
- `curl <url>` : Transfer data from or to a server
- `netstat -tuln` : Display listening ports and services

◆ Process Management

- `ps aux` : List running processes
- `kill <PID>` : Kill a process by its ID
- `killall <name>` : Kill all processes by name

◆ User Management

- `whoami` : Show current user
- `sudo <command>` : Run a command as superuser
- `adduser <username>` : Add a new user
- `passwd <username>` : Change user password
- `usermod -aG <group> <username>` : Add user to a group

◆ Archiving & Compression

- `tar -czvf <archive.tar.gz> <directory>` : Create a compressed archive
- `tar -xzvf <archive.tar.gz>` : Extract a compressed archive
- `zip <archive.zip> <file>` : Compress files into a zip archive
- `unzip <archive.zip>` : Extract a zip archive

◆ Package Management (Debian/Ubuntu)

- `apt update` : Update the list of available packages
- `apt upgrade` : Upgrade installed packages

- `apt install <package>` : Install a package
- `apt remove <package>` : Remove a package

♦ **Disk Management**

- `fdisk -l` : List disk partitions
- `mount /dev/<device> <directory>` : Mount a filesystem
- `umount /dev/<device>` : Unmount a filesystem