

# Basic Linux Commands with Examples

In this Linux cheat sheet, we will cover all the most important Linux commands.

## 1. File and Directory Operations Commands

| Command | Description                            |
|---------|--|
| ls      | List files and directories.            |
| cd      | Change directory.                      |
| pwd     | Print current working directory.       |
| mkdir   | Create a new directory.                |
| rm      | Remove files and directories.          |
| cp      | Copy files and directories.            |
| mv      | Move/rename files and directories.     |
| cat     | View the contents of a file.           |
| head    | Display the first few lines of a file. |
| tail    | Display the last few lines of a file.  |
| find    | Search for files and directories.      |

## 2. File Permission Commands

| Command | Description                   |
|---------|-------------------------------|
| chmod   | Change file permissions.      |
| chown   | Change file ownership.        |
| chgrp   | Change group ownership.       |
| umask   | Set default file permissions. |

## 3. File Compression and Archiving Commands

| Commands | Description                      |
|----------|----------------------------------|
| tar      | Create or extract archive files. |
| gzip     | Compress files.                  |
| zip      | Create compressed zip archives.  |

## 4. Process Management Commands

| Commands | Description  |
|----------|--|
| ps       | Display running processes.   |
| top      | Monitor system processes in real-time.   |
| kill     | Terminate a process.   |
| pkill    | Terminate processes based on their name.   |
| grep     | used to search for specific patterns or regular expressions in text files or streams and display matching lines. |

## 5. System Information Commands

| Command | Description                        |
|---------|------------------------------------|
| uname   | Print system information.          |
| whoami  | Display current username.          |
| df      | Show disk space usage.             |
| du      | Estimate file and directory sizes. |
| free    | Display memory usage information.  |
| uptime  | Show system uptime.                |
| lscpu   | Display CPU information.           |
| lspci   | List PCI devices.                  |
| lsusb   | List USB devices.                  |

## 6. Networking Commands

| Command  | Description                                 |
|----------|---|
| ifconfig | Display network interface information.      |
| ping     | Send ICMP echo requests to a host.          |
| netstat  | Display network connections and statistics. |
| ss       | Display network socket information.         |
| ssh      | Securely connect to a remote server.        |
| scp      | Securely copy files between hosts.          |
| wget     | Download files from the web.                |
| curl     | Transfer data to or from a server.          |