

Basic Linux Commands with Description

File & Directory Management

ls:

Lists files and directories in the current directory.

cd [directory]:

Changes the current directory.

pwd:

Prints the current working directory.

mkdir [dir_name]:

Creates a new directory.

rmdir [dir_name]:

Deletes an empty directory.

touch [file_name]:

Creates a new empty file or updates the timestamp of an existing file.

cp [source] [destination]:

Copies files or directories.

mv [source] [destination]:

Moves or renames files or directories.

rm [file_name]:

Removes a file.

rm -r [dir_name]:

Removes a directory and its contents recursively.

File Viewing

cat [file]:

Displays the contents of a file.

less [file]:

Views a file one page at a time (scrollable).

more [file]:

Views a file one page at a time (older than less).

head [file]:

Shows the first 10 lines of a file.

tail [file]:

Shows the last 10 lines of a file.

tail -f [file]:

Continuously monitors a file (e.g., logs).

Searching & Finding

find [path] -name [filename]:

Searches for files by name.

grep "[pattern]" [file]:

Searches for a pattern in a file.

locate [filename]:

Searches files using a pre-built database.

which [command]:

Shows the full path of a command.

Package Management (Debian/Ubuntu)

sudo apt update:

Updates the list of available packages.

sudo apt upgrade:

Installs available updates.

sudo apt install [package]:

Installs a package.

`sudo apt remove [package]:`

Uninstalls a package.

User Management

`whoami:`

Displays the current username.

`adduser [username]:`

Adds a new user.

`passwd [username]:`

Changes a user's password.

`su [user]:`

Switches to another user.

`logout:`

Logs out of the current session.

System Information

`uname -a:`

Displays system info.

`top:`

Shows running processes.

`htop:`

Interactive version of top (needs to be installed).

`df -h:`

Shows disk space usage.

`free -h:`

Shows memory usage.

`uptime:`

Shows how long the system has been running.

hostname:

Shows or sets the system's hostname.

Permissions

chmod [mode] [file]:

Changes file permissions.

chown [owner] [file]:

Changes file ownership.

Networking

ping [host]:

Tests connectivity to a host.

ifconfig:

Shows network interfaces (older).

ip a:

Shows network interfaces (modern).

netstat -tuln:

Lists listening ports and services.

curl [url]:

Fetches data from a URL.

wget [url]:

Downloads a file from the web.

Other Useful Commands

man [command]:

Opens the manual for a command.

history:

Shows previously used commands.

clear:

Clears the terminal screen.

echo "text":

Prints text to the screen.

date:

Displays current date and time.

cal:

Displays a calendar.