

Shell Commands with Purpose and Use

NAVIGATION

- pwd : Show your current directory location.
- ls : List files and folders.
- ls -l : Detailed listing with permissions & size.
- ls -a : Show hidden files.
- cd folder : Move to folder.
- cd .. : Move up.
- cd ~ : Go to home.

FILES & DIRECTORIES

- touch file : Create empty file.
- mkdir folder : Create directory.
- cp src dest : Copy files.
- cp -r src dest : Copy folders.
- mv src dest : Move or rename.
- rm file : Delete file.
- rm -r folder : Delete folder with contents.

VIEWING CONTENT

- cat file : Print file contents.
- less file : Scroll through file.
- head file : Show first 10 lines.
- tail file : Show last 10 lines.

SEARCHING

- grep "text" file : Search inside file.
- grep -r "text" folder : Search recursively.
- find /path -name pattern : Search for files by name.

REDIRECTION

- command > file : Redirect output (overwrite).
- command >> file : Append output.
- command 2> file : Redirect errors.
- command &> file : Send both output and errors to file.
- command | other : Pipe output to another command.
- command | tee file : View & save output.

PROCESS MANAGEMENT

- ps : List running processes.
- top : Live process viewer.
- kill PID : Stop a process.
- kill -9 PID : Force stop.

NETWORK

- ping site.com : Test connectivity.
- curl url : Fetch webpage content.
- wget url : Download file.
- ip a : Show network interfaces.

SYSTEM INFO

- `uname -a` : System & kernel info.
- `hostname` : Show computer name.
- `df -h` : Disk usage.
- `free -h` : Memory usage.
- `uptime` : System running time.

PERMISSIONS

- `chmod 755 file` : Change permissions.
- `chown user:group file` : Change file owner.

PACKAGE MANAGEMENT (APT)

- `sudo apt update` : Refresh package list.
- `sudo apt upgrade` : Install updates.
- `sudo apt install pkg` : Install package.
- `sudo apt remove pkg` : Uninstall package.