



Terminal Commands Cheat Sheet – Partha Edition

A high-speed reference for the most essential terminal commands across all sections. Perfect for quick lookup and memory refresh!

Navigation & Files

```
pwd          # Print working directory
ls           # List files
ls -la       # List all + detailed
cd folder/   # Enter folder
cd ..        # Go back
mkdir folder # New folder
touch file.txt # New file
rm file      # Remove file
rm -r folder/ # Remove folder
cp file1 file2 # Copy file
mv old new   # Rename/move
```

View & Edit Files

```
cat file.txt # View contents
less file.txt # Scrollable view
head file.txt # First lines
tail file.txt # Last lines
tail -f log.txt # Live log
nano file.txt # Basic editor
vim file.txt # Advanced editor
```



Permissions & Ownership

```
chmod +x file # Add execute
chmod 755 file # rwxr-xr-x
sudo chown user:group file # Change owner
```

Search & Filter

```
find . -name "*.js"           # Find files
grep "TODO" file.js           # Search in file
grep -r "pattern" .           # Recursive grep
find . -size +1M               # Large files
find . -name "*.js" -exec grep "TODO" {} \; # Find + grep
```

Redirection & Pipes

```
echo "hi" > out.txt           # Overwrite
cat file >> out.txt            # Append
wc -l < file.txt               # Input from file
cat file | grep "error"        # Pipe
cat file | tee copy.txt        # Pipe + save
```

Process Management

```
ps aux                        # List processes
top                           # Live processes
kill PID                      # Kill process
kill -9 PID                   # Force kill
jobs                          # Background jobs
fg                             # Foreground
bg                             # Background
&                             # Run in background
Ctrl+C / Ctrl+Z              # Kill / Pause
```

Combining Commands

```
cmd1; cmd2                    # Run both
cmd1 && cmd2                    # Run 2 if 1 succeeds
cmd1 || cmd2                   # Run 2 if 1 fails
```

Networking

```
ping google.com               # Check internet
curl -I site.com               # Headers
```

```
wget url           # Download
nslookup site.com  # DNS info
ip a               # IP address
```

Bash Scripting

```
#!/bin/bash
name="Partha"
echo "Hello $name"
```

Package Management (Debian/Ubuntu)

```
sudo apt update      # Update list
sudo apt upgrade      # Upgrade packages
sudo apt install name # Install package
sudo apt remove name  # Remove package
dpkg -i file.deb      # Install local package
```



Environment Variables

```
export VAR="value"    # Set temp variable
unset VAR              # Delete var
echo $VAR              # Print var
source ~/.bashrc       # Reload
```



50 Practice Exercises – All-In-One



Navigation & File Ops

1. Create a folder `workspace` and enter it.
2. Create 3 files `a.txt`, `b.txt`, `c.txt` in one command.
3. Copy `a.txt` to `backup.txt`.
4. Move `b.txt` to a new subfolder `old/`.
5. Delete `c.txt`.
6. Show all hidden files in current directory.
7. Rename `backup.txt` to `restored.txt`.
8. Remove the folder `old/` and its contents.

File Viewing & Editing

1. View the first 5 lines of `restored.txt`.
2. Append the date to `restored.txt` using `echo`.
3. Use `less` to scroll through a file.
4. Edit a file using `nano` and add your name.
5. Combine two files into one using `cat`.

Permissions & Ownership

1. Change a file's permission to `755`.
2. Add execute permission to a script.
3. Remove write permission for group/others.
4. Use `ls -l` to verify permission changes.
5. Change the owner of a file (use `sudo`).

Search & Filtering

1. Find all `.sh` files recursively.
2. Find all files larger than 10MB.
3. Search for the word "Partha" in all `.txt` files.
4. Combine `find` and `grep` to look for TODOs in `.js` files.

Redirection & Piping

1. Save `ls -l` output to a file.
2. Append output of `date` to a log.
3. Count lines in a file with `wc` and redirect input.
4. Use `tee` to log and display `grep` results.
5. Chain 3 commands with `&&` and `||`.

Process Management

1. Use `top` to observe running processes.
2. Run `sleep 30` in background and pause it.
3. Bring it to foreground and kill it.
4. Use `ps aux` to find your shell's PID.
5. Kill a dummy process using `kill`.

Combining Commands

1. Run `mkdir test` and `cd test` in one line.
2. Only run `echo success` if directory exists.
3. Try a failed command and fallback to `echo`.

Networking



1. Ping `google.com`.
2. Use `curl -I example.com`.
3. Download a file using `wget`.
4. Find your IP address using `ip a`.
5. Lookup domain info with `nslookup openai.com`.

Bash Scripting

1. Write a script to greet a user by name.
2. Write a script to sum 2 numbers given as args.
3. Loop from 1 to 10 and print numbers.
4. Save the script and make it executable.
5. Pass a filename to script and read from it.

Package Management

1. Update your package list.
2. Search for "nodejs".
3. Install and remove `htop`.
4. Show details of the `curl` package.
5. Install a local `.deb` package (mock/test).

 Tip: Track your completion with  and time yourself to improve terminal fluency!