

Linux Command Cheat Sheet

File & Directory Commands

Command	Description
<code>pwd</code>	Show current directory
<code>ls</code>	List files
<code>ls -la</code>	List all files with details
<code>cd folder</code>	Change directory
<code>cd ..</code>	Go up one directory
<code>mkdir folder</code>	Create directory
<code>rmdir folder</code>	Remove empty directory
<code>rm file</code>	Delete file
<code>rm -rf folder</code>	Delete directory recursively
<code>cp source destination</code>	Copy files
<code>mv old new</code>	Move or rename files
<code>touch file.txt</code>	Create empty file

File Viewing

Command	Description
<code>cat file</code>	Display file
<code>less file</code>	View large file
<code>head file</code>	First 10 lines
<code>tail file</code>	Last 10 lines
<code>tail -f log.txt</code>	Monitor log file
<code>nano file</code>	Open Nano editor
<code>vim file</code>	Open Vim editor

File Permissions

Command	Description
<code>chmod +x file</code>	Make executable
<code>chmod 755 file</code>	Set permissions
<code>chown user file</code>	Change owner
<code>chgrp group file</code>	Change group

Search Commands

Command	Description
<code>find . -name "*.txt"</code>	Find files
<code>locate file</code>	Locate file
<code>grep "word" file</code>	Search text
<code>grep -r "main"</code>	Recursive search

Process Management

Command	Description
<code>ps</code>	Running processes
<code>ps aux</code>	All processes
<code>top</code>	Live process monitor
<code>htop</code>	Interactive monitor
<code>kill PID</code>	Kill process
<code>killall chrome</code>	Kill by name

System Information

Command	Description
<code>uname -a</code>	Kernel information
<code>hostname</code>	Computer name
<code>whoami</code>	Current user
<code>id</code>	User ID
<code>df -h</code>	Disk usage
<code>du -sh folder</code>	Folder size
<code>free -h</code>	RAM usage
<code>uptime</code>	System uptime

Networking

Command	Description
<code>ip addr</code>	Show IP address
<code>ping google.com</code>	Test connectivity
<code>curl URL</code>	Fetch webpage
<code>wget URL</code>	Download file
<code>ssh user@host</code>	SSH login
<code>scp file user@host:/path</code>	Secure copy
<code>netstat -tulpn</code>	Network ports
<code>ss -tulpn</code>	Modern port viewer

Package Management (Ubuntu/Debian)

Command	Description
<code>sudo apt update</code>	Update package list
<code>sudo apt upgrade</code>	Upgrade packages
<code>sudo apt install package</code>	Install package
<code>sudo apt remove package</code>	Remove package
<code>sudo apt autoremove</code>	Remove unused packages

Disk Management

Command	Description
<code>lsblk</code>	List drives
<code>fdisk -l</code>	Show partitions
<code>mount</code>	Mounted drives
<code>umount</code>	Unmount drive

Compression

Command	Description
<code>zip file.zip folder</code>	Create ZIP
<code>unzip file.zip</code>	Extract ZIP
<code>tar -cvf archive.tar folder</code>	Create TAR
<code>tar -xvf archive.tar</code>	Extract TAR
<code>tar -czvf archive.tar.gz folder</code>	Create compressed archive

Useful Shortcuts

Shortcut	Action
<code>Ctrl + C</code>	Stop current command
<code>Ctrl + Z</code>	Pause process
<code>Ctrl + D</code>	Logout
<code>Ctrl + L</code>	Clear terminal
<code>Tab</code>	Auto-complete
<code>↑</code>	Previous command
<code>history</code>	Command history
<code>!!</code>	Repeat last command

Embedded Linux Essentials

Command	Description
<code>dmesg</code>	Kernel messages
<code>journalctl</code>	System logs
<code>systemctl status service</code>	Service status
<code>systemctl restart service</code>	Restart service
<code>lsusb</code>	List USB devices
<code>lspci</code>	List PCI devices
<code>i2cdetect -y 1</code>	Detect I ² C devices
<code>gpioinfo</code>	View GPIO information (libgpiod)

Raspberry Pi Commands

Command	Description
<code>raspi-config</code>	Raspberry Pi configuration
<code>vccencmd measure_temp</code>	CPU temperature
<code>hostname -I</code>	Display IP address
<code>gpioinfo</code>	GPIO line information