

Essential Linux Commands - Day 1 Summary

◆ Terminal Basics

Command	Description
<code>Ctrl + Alt + T</code>	Open terminal
<code>pwd</code>	Print current working directory
<code>cd</code>	Change directory to home
<code>cd /path/to/dir</code>	Change to absolute path
<code>cd ..</code>	Go to parent directory
<code>cd -</code>	Go to previous directory
<code>cd ~</code>	Shortcut to home directory
<code>ls</code>	List files and directories
<code>ls -l</code>	List with details
<code>ls -a</code>	List including hidden files
<code>clear</code>	Clear the terminal screen

Working with Directories

Command	Description
<code>mkdir</code> <code>dirname</code>	Create a directory
<code>mkdir -p</code> <code>a/b/c</code>	Create nested directories
<code>rmdir</code> <code>dirname</code>	Remove empty directory
<code>rm -r</code> <code>dirname</code>	Remove directory and contents

Working with Files

Command	Description
<code>touch filename</code>	Create an empty file
<code>echo "text" ></code> <code>file.txt</code>	Create/write to file (overwrite)
<code>echo "text" >></code> <code>file.txt</code>	Append to file
<code>cat file.txt</code>	View file contents
<code>cat file1 file2</code>	Concatenate files
<code>cat *.txt > all.txt</code>	Merge matching files into one
<code>less file.txt</code>	View file one page at a time
<code>head file.txt</code>	Show beginning of file
<code>tail file.txt</code>	Show end of file

Moving, Copying, and Renaming

Command	Description
<code>mv file dir/</code>	Move file to directory
<code>mv oldname newname</code>	Rename file or directory
<code>cp file newfile</code>	Copy file
<code>cp file dir/</code>	Copy file to directory
<code>cp -r dir1 dir2</code>	Copy directory recursively
<code>mv dir1/* .</code>	Move contents of a directory to current dir

Deleting Files and Directories

Command	Description
<code>rm file</code>	Delete file
<code>rm -i file</code>	Delete with confirmation
<code>rm -r dir</code>	Delete directory recursively
<code>rm -rf dir</code>	Force delete everything in directory (dangerous)

File and Package Information

Command	Description
<code>file filename</code>	Identify file type
<code>whereis command</code>	Show location of command binary, source, and man page
<code>which command</code>	Show path of executable used by shell
<code>dpkg -l</code>	List all installed packages
<code>dpkg -s packagename</code>	Show info about installed package
<code>dpkg -L packagename</code>	List files installed by package
<code>dpkg -i package.deb</code>	Install .deb package
<code>dpkg -r packagename</code>	Remove installed package

Installing Software (Debian/Ubuntu)

Command	Description
<code>sudo apt update</code>	Update package list
<code>sudo apt upgrade</code>	Upgrade installed packages
<code>sudo apt install packagename</code>	Install package
<code>sudo apt remove packagename</code>	Remove package
<code>sudo apt purge packagename</code>	Remove including config files

`sudo apt autoremove`

Remove unused
dependencies



System Info and Help

Command	Description
<code>whoami</code>	Show current username
<code>hostname</code>	Show system name
<code>uname -a</code>	Show kernel and system info
<code>df -h</code>	Show disk space usage
<code>du -sh *</code>	Show space used by directories
<code>top</code>	Show running processes
<code>htop</code>	Enhanced task manager (may need install)
<code>man command</code>	Show manual page for command
<code>command --help</code>	Show quick help for command



Wildcards and Globbing

Wildcard	Meaning
<code>*</code>	Matches any number of characters
<code>?</code>	Matches a single character
<code>[]</code>	Matches any one of the enclosed characters

File Name Safety Tips

- Use **quotes** (" ", ' ') for names with spaces: `mkdir "My Folder"`
 - Use **backslash** to escape space: `mkdir My\ Folder`
 - Prefer **underscores** (_) or **hyphens** (-) instead of spaces
-

Safety Tips for Deleting

- Always `pwd` to verify you're in the right directory.
- Use `rm -i` for confirmation before deleting.
- Avoid using `rm -rf` unless you're absolutely sure.