

Linux

DAY 1 - LINUX FUNDAMENTALS (NOTES + EXPLANATIONS)

1. Creating Files and Directories

- touch filename
- Creates a new empty file.
- mkdir foldername
- Creates a new directory.
- touch file{1..10}
- Creates multiple files in sequence: file1, file2, ... file10.

2. Listing Files

- ls
- Shows files in the current directory.
- ls -l
- Long listing format.
- Shows permissions, owner, group, size, and modification time.
- First character indicates type:
d = directory
- = file
- ls -lh
- Same as ls -l but in human readable size (KB/MB/GB).

3. Deleting Files and Directories

- rm filename
- Removes a file.
- rm -r foldername
- Removes a folder and its contents.
- rm -rf *
- Deletes all files and folders in the current directory (dangerous command).

4. Working With vi Editor

- vi filename

- Opens file in vi editor.

Inside vi:

- i

- Enter insert mode to start typing.

- Esc

- Exit insert mode.

- :w

- Save file.

- :wq

- Save and exit.

- :q!

- Exit without saving.

- yy

- Copy the current line.

- 2000p

- Paste the copied line 2000 times.

5. Process Management

- ps

- Shows processes running in the current shell.

- ps aux

- Shows all running processes on the system (detailed).

- ps -ef

- Full-format process listing with UID, PID, PPID, time, command.

- ps aux | grep name

- Filters processes by a keyword.

- kill PID

- Terminates the process with the given PID.

- kill -9 PID

- Force-kills the process.

6. Exploring /proc Directory

- /proc

- Virtual filesystem created by the kernel.
- Contains real-time system and process information.

- /proc/meminfo

- Shows available and used RAM details.

- /proc/cpuinfo

- Shows CPU details and core information.