

Basic Linux Terminal Commands

S.No. Linux Commands Functions

1	ls	Displays information about files in the current directory.
2	pwd	Displays the current working directory.
3	mkdir	Creates a directory.
4	cd	Changes the working directory
5	rmdir	Removes empty directories from the directory lists.
6	cp	Moves files from one directory to another.
7	mv	Rename and Replace the files
8	rm	Delete files
9	uname	Command to get basic information about the OS
10	locate	Find a file in the database.
11	touch	Create empty files
12	ln	Create shortcuts to other files
13	cat	Display file contents on terminal
14	clear	Clear terminal
15	ps	Display the processes in terminal
16	man	Access manual for all Linux commands
17	grep	Search for a specific string in an output
18	echo	Display active processes on the terminal
19	wget	download files from the internet.
20	whoami	Create or update passwords for existing users
21	sort	sort the file content
22	cal	View Calendar in terminal
23	whereis	View the exact location of any command typed after this command
24	df	Check the details of the file system
25	wc	Check the lines, word count, and characters in a file using different options

Lab (To be implemented in C)

- 1.Basic Commands in Linux Operating System
- 2.Write a Shell program to check the given number is even or odd
- 3.Write a Shell program to swap the two integers
- 4.Write a Shell program to find the factorial of a number
- 5.write a shell program to generate fibonacci series
- 6.Write a C program using the following system calls (fork, exec).
- 7.Write a C program using the following system calls (get_pid, exit).
- 8.Write a C program using the I/O system calls (open, read, write, etc)
- 9.Write a C program to simulate CPU scheduling algorithms: FCFS, SJF, and Round Robin
- 10.Write a C programs to simulate Page Replacement Algorithms a) FIFO b) LRU
11. Implementation of memory allocation algorithms: a)First Fit b) Best Fit c)Worst Fit)
- 12.Implement the Producer – Consumer problem using semaphores
- 13.Implement the Dining Philospher problem using semaphores
- 14.Write a C programs to simulate Intra & Inter – Process Communication (IPC) techniques.
15. Write a C program to simulate Bankers Algorithm for Deadlock Detection
16. Write a C program to simulate Bankers Algorithm for Deadlock Avoidance
17. Simulate all File Organization Techniques a) Single level directory b) Two level
18. Simulate all file allocation strategies a) Sequential b) Indexed c) Linked.
19. Write a C programs to simulate implementation of FCFS Disk Scheduling Algorithms.

20. Write a C program to simulate implementation SSTF Disk Scheduling Algorithm.

The *head* Command

`head [OPTIONS] FILES`

```
$ head filename.txt
```

It will give first ten lines of the input file

Output a Specific Number of Lines

For example, if we want to have the first five lines printed to standard out, we'd use `-n 5`:

```
$ head -n 5 filename.txt
```

4. The *tail* Command

`tail [OPTIONS] FILES`

The *tail* command will by default write the last ten lines of the input file

example shows how to get the **last seven lines from the input file**:

```
$ tail -n 7 numbers_en.txtS
```