

Assign 1 : Basic Linux Commands

Command to change hostname :

`sudo hostnamectl set-hostname D3-Ejka-93147`

1. man : Command to get help about commands

2. Uname : Print System information

```
sunbeam@D3-Ekta-93147:~/Desktop$ uname
Linux
```

3. Pwd : Print current directory

```
sunbeam@D3-Ekta-93147:~/Desktop$ pwd
/home/sunbeam/Desktop
```

4. Hostname

```
sunbeam@D3-Ekta-93147:~/Desktop$ hostname
D3-Ekta-93147
```

5.date : Find today's date

```
sunbeam@D3-Ekta-93147:~/Desktop$ date
Monday 27 October 2025 04:09:42 PM IST
```

6.cal : Print calendar for current year

```
sunbeam@D3-Ekta-93147:~/Desktop$ cal
      October 2025
Su Mo Tu We Th Fr Sa
                1  2  3  4
 5  6  7  8  9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30 31
```

7.ls, dir

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System$ dir
assignment practice sdm
```

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ ls
data.txt new.txt user.txt
```

8. Cat : read file

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ cat new.txt
hello world
how are you?
Good morning, I am fine.
```

9.cat >> : Append some text into existing file

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ cat >> new.txt
hello world
how are you?
Good morning, I am fine.
```

10.cp : Copy a file, Copy a directory

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ cp new.txt data.txt
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ cat data.txt
hello world
how are you?
Good morning, I am fine.
```

11.mv : Rename the files

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ mv new.txt newYear.txt
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ ls
data.txt  newYear.txt  user.txt
```

12 mv : moving the file

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ mkdir backup
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ mv data.txt backup/
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ ls
backup  newYear.txt  user.txt
```

13.tac, rev : Print the file in reverse order, Reverse each line in the file

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ rev newYear.txt
dlrow olleh
?uoy era woh
.enif ma I ,gninrom dooG
```

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ tac newYear.txt
Good morning, I am fine.
how are you?
hello world
```

14.wc : Count the words, characters and lines in a file

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ wc new.txt
 5 10 52 new.txt
```

15.mkdir : Create directory

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ ls
backup lab new.txt user.txt
```

16.cd : Change current directory

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ cd lab
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice/lab$ cd ..
```

17.rm : Remove a file, remove a directory (with -R)

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ rm user.txt
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ ls
backup lab new.txt
```

18.rmdir : remove empty directory

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ rmdir lab
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ ls
backup new.txt
```

19.touch : change the modification time , Create Multiple empty files at once

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ touch notes.txt
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ stat notes.txt
  File: notes.txt
  Size: 0          Blocks: 0          IO Block: 4096   regular empty file
Device: 10303h/66307d Inode: 956013    Links: 1
Access: (0664/-rw-rw-r-- )  Uid: ( 1000/ sunbeam)   Gid: ( 1000/ sunbeam)
Access: 2025-10-27 17:42:06.931711600 +0530
Modify: 2025-10-27 17:42:06.931711600 +0530
Change: 2025-10-27 17:42:06.931711600 +0530
Birth: 2025-10-27 17:42:06.931711600 +0530
```

20.sort : Sort file.

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ sort new.txt
Good morning, I am fine.
hello world
how are you?
```

21.uniq : Avoid repetition in a file.

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ cat new.txt
hello world
how are you?
Good morning, I am fine.

welcome to this file
good evening
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ uniq new.txt
hello world
how are you?
Good morning, I am fine.

welcome to this file
good evening
```

22.head : Print the specified number of lines from top in the file.

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ head -n 3 new.txt
hello world
how are you?
Good morning, I am fine.
```

23.tail : Print the specified number of lines from bottom in the file.

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ tail -n 3 new.txt

welcome to this file
good evening
```

24.factor : Find the factors of a number

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ factor 100
100: 2 2 5 5
```

25.alias : Create command shortcut

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ alias list="ls"
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ list
backup  new.txt  notes.txt
```

26.unalias : remove the command shortcut

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ alias list="ls"
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ list
backup  new.txt  notes.txt
```

27.echo : Print environment variables individually

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ echo "hello, World!"
hello, World!
```

28.ps : Print current processes

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ ps
  PID TTY          TIME CMD
 7240 pts/0    00:00:00 bash
 8166 pts/0    00:00:00 ps
```

29.kill : Kill the process

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ kill
kill: usage: kill [-s sigspec | -n signum | -sigspec] pid | jobspec ... or kill -l [sigspec]
```

30.env : Print environment variables

```
sunbeam@D3-Ekta-93147:/media/sunbeam/Windows/C-DAC/Operating System/practice$ env
SHELL=/bin/bash
SESSION_MANAGER=local/D3-Ekta-93147:@/tmp/.ICE-unix/1523,unix/D3-Ekta-93147:/tmp/.ICE-unix/1523
QT_ACCESSIBILITY=1
COLORTERM=truecolor
XDG_CONFIG_DIRS=/etc/xdg/xdg-ubuntu:/etc/xdg
SSH_AGENT_LAUNCHER=gnome-keyring
XDG_MENU_PREFIX=gnome-
GNOME_DESKTOP_SESSION_ID=this-is-deprecated
LANGUAGE=en_IN:en
GNOME_SHELL_SESSION_MODE=ubuntu
SSH_AUTH_SOCK=/run/user/1000/keyring/ssh
```