

Assignment 1 : Basic Linux Commands

Commands - To Do

1. man - Command to get help about commands

```
LS(1) User Commands
NAME
    ls - list directory contents
SYNOPSIS
    ls [OPTION]... [FILE]...
```

2. uname - Print System information

```
ayush-patre-ubuntu@D5Ayush92597:~$ uname
Linux
```

3. pwd - Print current directory

```
ayush-patre-ubuntu@D5Ayush92597:~$ pwd
/home/ayush-patre-ubuntu
```

4. hostname - Print IP address and hostname of the machine

```
ayush-patre-ubuntu@D5Ayush92597:~$ hostname
D5Ayush92597
```

5. date - Find today's date

```
ayush-patre-ubuntu@D5Ayush92597:~$ date
Sat Oct 25 03:55:44 PM IST 2025
```

6. cal - Print calendar for current year

```
ayush-patre-ubuntu@D5Ayush92597:~$ 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 - See directory structure

```
ayush-patre-ubuntu@D5Ayush92597:~$ ls
111.txt  1.txt    Documents  file.txt  myfile.txt  Pictures  snap      two
11.txt   Desktop  Downloads  Music     one         Public    Templates Videos
ayush-patre-ubuntu@D5Ayush92597:~$ dir
111.txt  1.txt    Documents  file.txt  myfile.txt  Pictures  snap      two
11.txt   Desktop  Downloads  Music     one         Public    Templates Videos
```

8. cat - Create file

```
ayush-patre-ubuntu@D5Ayush92597:~$ cat abc.txt
hello world
```

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

```
ayush-patre-ubuntu@D5Ayush92597:~$ cat >> abc.txt
hello sunbeam
^C
ayush-patre-ubuntu@D5Ayush92597:~$ cat abc.txt
hello world
hello sunbeam
```

10. cp - Copy a file, Copy a directory

11. mv - Move the files

```
ayush-patre-ubuntu@D5Ayush92597:~$ mv Desktop Documents
```

12. mv - Rename a file

```
ayush-patre-ubuntu@D5Ayush92597:~$ mv bcd.txt abc.txt
```

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

```
ayush-patre-ubuntu@D5Ayush92597:~$ cat abc.txt
hello world
hello sunbeam
ayush-patre-ubuntu@D5Ayush92597:~$ tac abc.txt
hello sunbeam
hello world
```

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

```
ayush-patre-ubuntu@D5Ayush92597:~$ wc abc.txt
 2  4 26 abc.txt
```

15. mkdir - Create directory

```
ayush-patre-ubuntu@D5Ayush92597:~$ mkdir Hello
```

16. cd - Change current directory

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

```
ayush-patre-ubuntu@D5Ayush92597:~$ rm abc.txt
```

18. rmdir - remove empty directory

```
ayush-patre-ubuntu@D5Ayush92597:~$ mkdir temp
ayush-patre-ubuntu@D5Ayush92597:~$ ls
111.txt  1.txt      Downloads  hello  Music      one      Public  temp      two
11.txt   Documents  file.txt   Hello  myfile.txt Pictures  snap    Templates Videos
ayush-patre-ubuntu@D5Ayush92597:~$ ls temp
ayush-patre-ubuntu@D5Ayush92597:~$ rmdir temp
ayush-patre-ubuntu@D5Ayush92597:~$ ls
111.txt  1.txt      Downloads  hello  Music      one      Public  Templates Videos
11.txt   Documents  file.txt   Hello  myfile.txt Pictures  snap    two
```

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

```
ayush-patre-ubuntu@D5Ayush92597:~$ ls
111.txt  abc.txt  Documents  hello  myfile.txt  Public  two
11.txt   bcd.txt  Downloads  Hello  one         snap    Videos
1.txt    cde.txt  file.txt   Music  Pictures     Templates
```

20. sort - Sort file.

```
ayush-patre-ubuntu@D5Ayush92597:~$ sort abc.txt
a
b
d
e
f
h
s
t
```

21. uniq - Avoid repetition in a file.

a
a
a
a
a
a

a
a
a
a
a

a
b
e
f
d
t
h
s

a
m
n
o
a
e
a

a

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

```
ayush-patre-ubuntu@D5Ayush92597:~$ head abc.txt
```

```
a  
b  
e  
f  
d  
t  
h  
s
```

```
a
```

```
ayush-patre-ubuntu@D5Ayush92597:~$ tail abc.txt
```

```
a  
a  
a  
  
a  
a  
a  
a  
a
```

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

```
ayush-patre-ubuntu@D5Ayush92597:~$ uniq abc.txt
```

```
a  
b  
e  
f  
d  
t  
h  
s  
  
a  
m  
n  
o  
a  
e  
a  
  
a
```

```
ayush-patre-ubuntu@D5Ayush92597:~$ head abc.txt
```

```
a  
b  
e  
f  
d  
t  
h  
s  
  
a
```

24. factor - Find the factors of a number

```
ayush-patre-ubuntu@D5Ayush92597:~$ factor 10
10: 2 5
```

25. alias - Create command shortcut

```
ayush-patre-ubuntu@D5Ayush92597:~$ alias
alias alert='notify-send --urgency=low -i "${[ $? = 0 ]} && echo terminal || echo error)" "$(history|tail -n1|sed -e '\''s/^\s*[0-9]\+\s*//;s/[\;&]\s*alert$/\s*\s*'\''"'
alias egrep='egrep --color=auto'
alias fgrep='fgrep --color=auto'
alias grep='grep --color=auto'
alias l='ls -CF'
alias la='ls -A'
alias ll='ls -aF'
alias ls='ls --color=auto'
```

26. unalias - remove the command shortcut

```
ayush-patre-ubuntu@D5Ayush92597:~$ unalias
unalias: usage: unalias [-a] name [name ...]
```

27. echo - Print environment variables individually

```
ayush-patre-ubuntu@D5Ayush92597:~$ echo hello
hello
```

28. ps - Print current processes

```
ayush-patre-ubuntu@D5Ayush92597:~$ ps
  PID TTY          TIME CMD
 3762 pts/0    00:00:00 bash
10364 pts/0    00:00:00 ps
```

29. kill - Kill the process

```
ayush-patre-ubuntu@D5Ayush92597:~$ kill
kill: usage: kill [-s sigspec | -n signum | -sigspec] pid | jobspec ... or kill -l [sigspec]
```

30. env - Print environment variables

```
ayush-patre-ubuntu@D5Ayush92597:~$ env
SHELL=/bin/bash
SESSION_MANAGER=local/D5Ayush92597:@/tmp/.ICE-unix/2686,unix/D5Ayush92597:/tmp/.ICE-unix/2686
QT_ACCESSIBILITY=1
COLORTERM=truecolor
XDG_CONFIG_DIRS=/etc/xdg/xdg-ubuntu:/etc/xdg
XDG_MENU_PREFIX=gnome-
GNOME_DESKTOP_SESSION_ID=this-is-deprecated
GNOME_SHELL_SESSION_MODE=ubuntu
SSH_AUTH_SOCK=/run/user/1000/keyring/ssh
MEMORY_PRESSURE_WRITE=c29tZSAyMDAwMDAgMjAwMDAwMAA=
XMODIFIERS=@im=ibus
DESKTOP_SESSION=ubuntu
GTK_MODULES=gail:atk-bridge
PWD=/home/ayush-patre-ubuntu
LOGNAME=ayush-patre-ubuntu
XDG_SESSION_DESKTOP=ubuntu
XDG_SESSION_TYPE=x11
GPG_AGENT_INFO=/run/user/1000/gnupg/S.gpg-agent:0:1
SYSTEMD_EXEC_PID=2785
XAUTHORITY=/run/user/1000/gdm/Xauthority
WINDOWPATH=2
HOME=/home/ayush-patre-ubuntu
USERNAME=ayush-patre-ubuntu
LANG=en_US.UTF-8
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:or=40;31;01:mi=00:su=37;41:sg=30;43:ca=00:tw=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=01;31:*.arc=01;31:*.arj=01;31:*.taz=01;31:*.lha=01;31:*.lz4=01;31:*.lzh=01;31:*.lzma=01;31:*.tlz=01;31:*.txz=01;31:*.tzo=01;31:*.t7z=01;31:*.zip=01;31:*.z=01;31:*.dz=01;31:*.gz=01;31:*.lrz=01;31:*.lz=01;31:*.lzo=01;31:*.xz=01;31:*.zst=01;31:*.tzst=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;31:*.tbz2=01;31:*.tz=01;31:*.deb=01;31:*.rpm=01;31:*.jar=01;31:*.war=01;31:*.ear=01;31:*.sar=01;31:*.rar=01;31:*.alz=01;31:*.ace=01;31:*.zoo=01;31:*.cpio=01;31:*.7z=01;31:*.rz=01;31:*.cab=01;31:*.wim=01;31:*.swm=01;31:*.dwm=01;31:*.esd=01;31:*.avif=01;35:*.jpg=01;35:*.jpeg=01;35:*.mjpg=01;35:*.mjpeg=01;35:*.gif=01;35:*.bmp=01;35:*.pbm=01;35:*.pgm=01;35:*.ppm=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.mng=01;35:*.pcx=01;35:*.mov=01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=01;35:*.webp=01;35:*.ogm=01;35:*.mp4=01;35:*.m4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01;35:*.nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.avi=01;35:*.fli=01;35:*.flv=01;35:*.gl=01;35:*.dl=01;35:*.xcf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.ogv=01;35:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m4a=00;36:*.mid=00;36:*.midi=00;36:*.mka=00;36:*.mp3=00;36:*.mpc=00;36:*.ogg=00;36:*.o
```