

Report on : Kali Linux Command Line Essentials

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1. To display present working directory

Pwd - It is to display the current directory you are in.

2. To list the directories and files in the current directory.

ls - It is to display the list of files and directories in the current directory

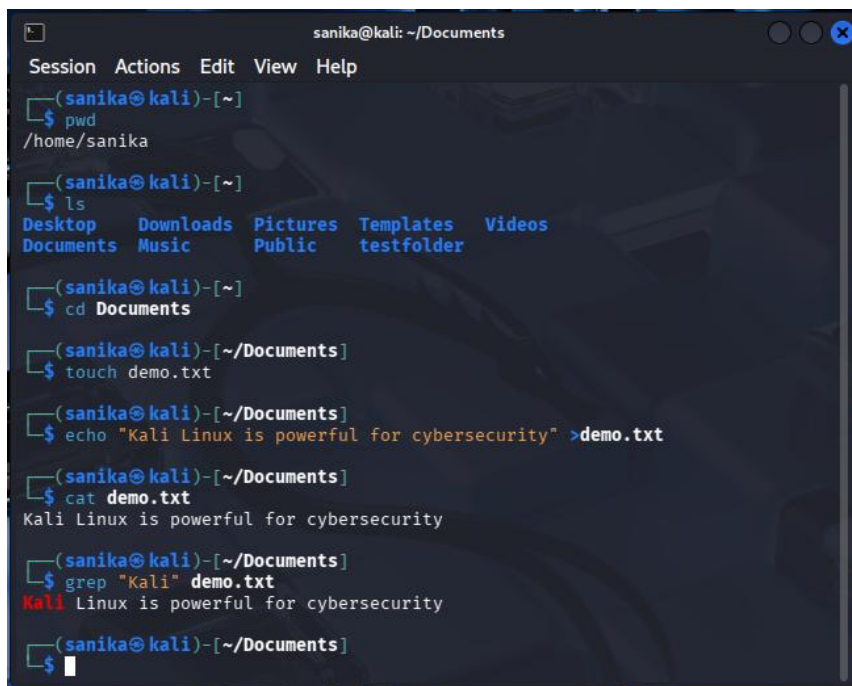
3. To change the current working directory

cd - This command will change the directory you are currently working on.

4. Search for a Word in a File

grep keyword filename - It searches for a specific keyword or pattern inside a file and displays matching lines.

Output:

A terminal window titled 'sanika@kali: ~/Documents' with a menu bar (Session, Actions, Edit, View, Help). The terminal shows a series of commands and their outputs: 1. 'pwd' returns '/home/sanika'. 2. 'ls' lists 'Desktop', 'Downloads', 'Pictures', 'Templates', 'Videos', 'Documents', 'Music', 'Public', and 'testfolder'. 3. 'cd Documents' changes the directory to '~/Documents'. 4. 'touch demo.txt' creates a new file. 5. 'echo "Kali Linux is powerful for cybersecurity" >demo.txt' writes text to the file. 6. 'cat demo.txt' displays the text 'Kali Linux is powerful for cybersecurity'. 7. 'grep "Kali" demo.txt' outputs 'Kali Linux is powerful for cybersecurity'.

```
sanika@kali: ~/Documents
Session Actions Edit View Help

(sanika@kali)~
$ pwd
/home/sanika

(sanika@kali)~
$ ls
Desktop  Downloads  Pictures  Templates  Videos
Documents Music      Public    testfolder

(sanika@kali)~
$ cd Documents

(sanika@kali)~/Documents
$ touch demo.txt

(sanika@kali)~/Documents
$ echo "Kali Linux is powerful for cybersecurity" >demo.txt

(sanika@kali)~/Documents
$ cat demo.txt
Kali Linux is powerful for cybersecurity

(sanika@kali)~/Documents
$ grep "Kali" demo.txt
Kali Linux is powerful for cybersecurity

(sanika@kali)~/Documents
$
```

5. To create a new directory

mkdir directory_name - It will create a new directory in the current folder with the name directory_name.

Output:

```
(sanika@kali)-[~/Documents]
$ mkdir new_folder

(sanika@kali)-[~/Documents]
$ ls
cat demo.txt new_folder

(sanika@kali)-[~/Documents]
$
```

6. To remove a directory

rmdir directory_name - It will remove the directory with the name directory_name from the current directory.

Output :

```
(sanika@kali)-[~/Documents]
$ rmdir new_folder

(sanika@kali)-[~/Documents]
$ ls
cat demo.txt

(sanika@kali)-[~/Documents]
$
```

7. To move a file

mv source destination - It is used to move a file from one location to another.

Output :

```
(sanika@kali)-[~/Documents]
$ mkdir testdir

(sanika@kali)-[~/Documents]
$ mv file.txt testdir/

(sanika@kali)-[~/Documents]
$ ls testdir
file.txt

(sanika@kali)-[~/Documents]
$ ls
cat cyber demo.txt testdir
```

8. To copy a file

cp source destination - It will copy the file from the source to the destination.

Output:

```
(sanika@kali)~[/Documents]
$ cp file.txt work/

(sanika@kali)~[/Documents]
$ ls
cat demo.txt file.txt testdir work

(sanika@kali)~[/Documents]
$ ls work
file.txt
```

9. To create a new file

touch file name - Creates a new empty file (or updates the timestamp if the file already exists).

Output:

```
(sanika@kali)~[/Documents]
$ touch notes.txt

(sanika@kali)~[/Documents]
$ ls
cat demo.txt file.txt notes.txt
```

10. To display manual of a command

man ls - This command will display a manual or a user guide for the command.

Output:

```
sanika@kali: ~/Documents
Session Actions Edit View Help
LS(1) User Commands LS(1)

NAME
ls - list directory contents

SYNOPSIS
ls [OPTION]... [FILE]...

DESCRIPTION
List information about the FILES (the current directory by default).
Sort entries alphabetically if none of -cftuvSUX nor --sort is speci-
fied.

Mandatory arguments to long options are mandatory for short options
too.

-a, --all
do not ignore entries starting with .

-A, --almost-all
do not list implied . and ..

--author
with -l, print the author of each file

-b, --escape
print C-style escapes for nongraphic characters

Manual page ls(1) line 1 (press h for help or q to quit)
```

11. To check the internet connection or to check whether the host is active or not.

ping google.com - It will send some packets to the mentioned host and will give us output about the details of what is the status of the packet. This command could be used to check the internet connection.

Output:

```
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=320 ttl=12
0 time=6.15 ms
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=321 ttl=12
0 time=4.96 ms
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=322 ttl=12
0 time=5.11 ms
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=323 ttl=12
0 time=15.2 ms
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=324 ttl=12
0 time=5.87 ms
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=325 ttl=12
0 time=5.17 ms
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=326 ttl=12
0 time=4.77 ms
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=327 ttl=12
0 time=5.06 ms
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=328 ttl=12
0 time=5.43 ms
64 bytes from bom12s08-in-f14.1e100.net (142.250.67.206): icmp_seq=329 ttl=12
0 time=5.51 ms
^C
— google.com ping statistics —
329 packets transmitted, 326 received, 0.911854% packet loss, time 342038ms
rtt min/avg/max/mdev = 3.406/32.919/1871.005/135.626 ms, pipe 2
(sanika@kali)-[~/Documents]
$
```

12. To display network interface details.

ifconfig - It is used to display the details of the network interfaces connected to the system.

Output :

```
(sanika@kali)-[~/Documents]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1280
    inet 192.168.0.118 netmask 255.255.255.0 broadcast 192.168.0.255
    inet6 fe80::a00:27ff:fea4:e085 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:a4:e0:85 txqueuelen 1000 (Ethernet)
    RX packets 415 bytes 38772 (37.8 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 372 bytes 36848 (35.9 KiB)
    TX errors 0 dropped 6 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 8 bytes 480 (480.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 8 bytes 480 (480.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

13. To download a file

wget link to file - It will download the file from the link entered in the command.

Output:

```
(sanika@kali)-[~/Documents]
$ wget http://en.wikipedia.org/wiki/cat
--2025-12-30 19:21:59-- http://en.wikipedia.org/wiki/cat
Resolving en.wikipedia.org (en.wikipedia.org) ... 103.102.166.224, 2001:df2:e5
00:ed1a::1
Connecting to en.wikipedia.org (en.wikipedia.org)|103.102.166.224|:80 ... conn
ected.
HTTP request sent, awaiting response ... 301 Moved Permanently
Location: https://en.wikipedia.org/wiki/cat [following]
--2025-12-30 19:21:59-- https://en.wikipedia.org/wiki/cat
Connecting to en.wikipedia.org (en.wikipedia.org)|103.102.166.224|:443 ... con
nected.
HTTP request sent, awaiting response ... 301 Moved Permanently
Location: https://en.wikipedia.org/wiki/Cat [following]
--2025-12-30 19:22:00-- https://en.wikipedia.org/wiki/Cat
Reusing existing connection to en.wikipedia.org:443.
HTTP request sent, awaiting response ... 200 OK
Length: 992708 (969K) [text/html]
Saving to: 'cat.1'

cat.1                  100%[=====>] 969.44K   220KB/s   in 4.5s

2025-12-30 19:22:04 (216 KB/s) - 'cat.1' saved [992708/992708]

(sanika@kali)-[~/Documents]
$
```

14. To install a package

Syntax: sudo apt install package_name

sudo apt install netcat - It is used to install the mentioned package in the system.

Output:

```
(sanika@kali)-[~/Documents]
$ sudo apt install net-tools
net-tools is already the newest version (2.10-2).
net-tools set to manually installed.
The following packages were automatically installed and are no longer require
d:
  curlftpfs          libfuse2t64          libswscale8
  libavfilter10      libpocketsphinx3     pocketsphinx-en-us
  libavformat61      libpostproc58
  libconfig-inifiles-perl  libsphinxbase3t64
Use 'sudo apt autoremove' to remove them.
```

15. To remove a package

Syntax: `sudo apt remove package_name`

sudo apt remove netcat - It will remove the mentioned package from the system.

Output:

```
(sanika@kali)~[/Documents]
$ sudo apt remove net-tools
The following packages were automatically installed and are no longer required:
 curlftpfs          libfuse2t64        libswscale8
 libavfilter10      libpocketsphinx3   pocketsphinx-en-us
 libavformat61      libpostproc58
 libconfig-inifiles-perl libsphinxbase3t64
Use 'sudo apt autoremove' to remove them.

REMOVING:
 iodine             kali-linux-headless net-tools wifite
 kali-linux-default kali-tools-top10    responder

Summary:
Upgrading: 0, Installing: 0, Removing: 7, Not Upgrading: 6
Freed space: 13.9 MB
```

16. To upgrade packages in the system

sudo apt upgrade - This command will upgrade all the packages in the system.

Output:

```
(sanika@kali)~[/Documents]
$ sudo apt upgrade
The following packages were automatically installed and are no longer required:
 curlftpfs          libfuse2t64        libswscale8
 libavfilter10      libpocketsphinx3   pocketsphinx-en-us
 libavformat61      libpostproc58
 libconfig-inifiles-perl libsphinxbase3t64
Use 'sudo apt autoremove' to remove them.

Not upgrading:
 libavfilter10  libavutil59  nodejs
 libavformat61  libswscale8  python3-tables-lib

Summary:
Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 6
```


17. To fetch the packages updates

sudo apt update - This command will check for updates of all the packages and will add the updates in the list to upgrade.

Output:

```
(sanika@kali)~[~/Documents]
$ sudo apt update
Hit:1 http://http.kali.org/kali kali-rolling InRelease
6 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

18. To get the current username

whoami - This command is used to print the username of the current user.

Output:

```
(sanika@kali)~[~/Documents]
$ whoami
sanika

(sanika@kali)~[~/Documents]
$
```

19. To change the current user to superuser or root

sudo su - This command will ask for a password and will change the current user to root.

Output:

```
(sanika@kali)~[~/Documents]
$ suho su
Command 'suho' not found, did you mean:
  command 'sudo' from deb sudo
  command 'sudo' from deb sudo-ldap
  command 'sumo' from deb sumo
Try: sudo apt install <deb name>

(sanika@kali)~[~/Documents]
$
```


20. Print Text on the Terminal

echo " To print something on terminal" - The command will print the mentioned text on the terminal

Output:

```
(sanika@kali)-[~/Documents]
$ echo "To print something on terminal"
To print something on terminal

(sanika@kali)-[~/Documents]
$
```

21. Display system hostname

Kali – It is use to display system hostname.

Output:

```
(sanika@kali)-[~/Documents]
$ hostname
kali

(sanika@kali)-[~/Documents]
$
```

22. Show date and time

date — Displays the current system date and time.

Output:

```
(sanika@kali)-[~/Documents]
$ date
Tuesday 30 December 2025 07:46:51 PM IST

(sanika@kali)-[~/Documents]
$
```

23. Show system uptime

uptime — Shows how long the system has been running, along with load average.

Output:

```
(sanika@kali)-[~/Documents]
$ uptime
19:48:02 up 49 min,  1 user,  load average: 0.22, 0.14, 0.10

(sanika@kali)-[~/Documents]
$
```

24. Show kernel information

uname -a — Displays complete kernel and system information.

Output:

```
(sanika@kali)-[~/Documents]
$ uname -a
Linux kali 6.17.10+kali-amd64 #1 SMP PREEMPT_DYNAMIC Kali 6.17.10-1kali1 (2025-12-08) x86_64 GNU/Linux

(sanika@kali)-[~/Documents]
$
```

25. Show running processes

ps — Displays currently running processes for the current user.

Output:

```
(sanika@kali)-[~/Documents]
$ ps
  PID TTY          TIME CMD
 1680 pts/0        00:00:04 zsh
 26791 pts/0        00:00:00 ps

(sanika@kali)-[~/Documents]
$
```

26. Show all running processes

ps -ef — Displays all running processes for all users with full details.

Output:

```
(sanika@kali) - [~/Documents]
$ ps aux
USER          PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root             1  0.0  0.6 25136 15648 ?        Ss   18:58   0:02 /sbin/init
root             2  0.0  0.0      0     0 ?        S    18:58   0:00 [kthreadd]
root             3  0.0  0.0      0     0 ?        S    18:58   0:00 [pool_work
root             4  0.0  0.0      0     0 ?        I<   18:58   0:00 [kworker/R
root             5  0.0  0.0      0     0 ?        I<   18:58   0:00 [kworker/R
root             6  0.0  0.0      0     0 ?        I<   18:58   0:00 [kworker/R
root             7  0.0  0.0      0     0 ?        I<   18:58   0:00 [kworker/R
root             8  0.0  0.0      0     0 ?        I<   18:58   0:00 [kworker/R
root            10  0.0  0.0      0     0 ?        I<   18:58   0:00 [kworker/0
root            12  0.0  0.0      0     0 ?        I    18:58   0:00 [kworker/u
root            13  0.0  0.0      0     0 ?        I<   18:58   0:00 [kworker/R
root            14  0.0  0.0      0     0 ?        S    18:58   0:00 [ksoftirqd
root            15  0.3  0.0      0     0 ?        I    18:58   0:09 [rcu_preem
root            16  0.0  0.0      0     0 ?        S    18:58   0:00 [rcu_exp_p
root            17  0.0  0.0      0     0 ?        S    18:58   0:01 [rcu_exp_g
root            18  0.0  0.0      0     0 ?        S    18:58   0:00 [migration
root            19  0.0  0.0      0     0 ?        S    18:58   0:00 [idle_inje
root            20  0.0  0.0      0     0 ?        S    18:58   0:00 [cpuhp/0]
root            21  0.0  0.0      0     0 ?        S    18:58   0:00 [cpuhp/1]
root            22  0.0  0.0      0     0 ?        S    18:58   0:00 [idle_inje
```

27. Display IP address

ip addr — Displays all network interfaces along with their IP addresses.

Output:

```
(sanika@kali) - [~/Documents]
$ ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1280 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:a4:e0:85 brd ff:ff:ff:ff:ff:ff
    inet 192.168.0.118/24 brd 192.168.0.255 scope global dynamic noprefixroute eth0
        valid_lft 3853sec preferred_lft 3853sec
    inet6 fe80::a00:27ff:fea4:e085/64 scope link noprefixroute
        valid_lft forever preferred_lft forever

(sanika@kali) - [~/Documents]
```

28. Show routing table

ip route — Displays the system's routing table.

Output:

```
(sanika@kali)-[~/Documents]
$ ip route
default via 192.168.0.1 dev eth0 proto dhcp src 192.168.0.118 metric 100
192.168.0.0/24 dev eth0 proto kernel scope link src 192.168.0.118 metric 100

(sanika@kali)-[~/Documents]
$
```

29. Display network devices

ip link — Displays all network devices and their status.

Output:

```
(sanika@kali)-[~/Documents]
$ nmcli device status
DEVICE  TYPE      STATE      CONNECTION
eth0    ethernet  connected  Wired connection 1
lo      loopback  connected (externally)  lo

(sanika@kali)-[~/Documents]
$
```

30. Show wireless info

iwconfig — Displays information about wireless network interfaces.

Output:

```
(sanika@kali)-[~/Documents]
$ iwconfig
lo          no wireless extensions.

eth0       no wireless extensions.

(sanika@kali)-[~/Documents]
$
```

31. Display command history

history — Displays the list of previously executed commands.

Output:

```
(sanika@kali)~[~/Documents]
$ history
1  sudo apt update && sudo apt upgrade -y
2  cat /etc/os-release
3  sudo apt install -y virtualbox-guest-utils virtualbox-guest-x11
4  rebot
5  reboot
6  pwd
7  ls
8  cd
9  grep keybord filename
10 pwd
11 is
12 ls
13 cat filename
14 ls
15 mkdir directory_name
16 ls
17 rmdir directory_name/
18 ls
19 mv filrname new_folder/
20 mv filename new_folder/
21 m
```

32. Shows open network ports.

ss -tuln — Shows all open TCP and UDP network ports in listening state.

Output:

```
(sanika@kali)~[~/Documents]
$ ss -tuln
Netid State  Recv-Q  Send-Q   Local Address:Port  Peer Address:Port
```


33. List USB devices

lsusb — Lists all USB devices connected to the system.

Output:

```
(sanika@kali) - [~/Documents]
$ lsusb
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 002 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Bus 002 Device 002: ID 80ee:0021 VirtualBox USB Tablet

(sanika@kali) - [~/Documents]
$
```

34. Displays environment variables.

env : Displays all environment variables.

Output:

```
(sanika@kali) - [~/Documents]
$ env
COLORFGBG=15;0
COLORTERM=truecolor
COMMAND_NOT_FOUND_INSTALL_PROMPT=1
DBUS_SESSION_BUS_ADDRESS=unix:path=/run/user/1000/bus
DESKTOP_SESSION=lightdm-xsession
DISPLAY=:0.0
DOTNET_CLI_TELEMETRY_OPTOUT=1
GDMSESSION=lightdm-xsession
HOME=/home/sanika
LANG=en_IN
LANGUAGE=en_IN:en
LOGNAME=sanika
NMAP_PRIVILEGED=
PANEL_GDK_CORE_DEVICE_EVENTS=0
PATH=/home/sanika/.local/bin:/usr/local/sbin:/usr/sbin:/sbin:/usr/local/bin:/usr/bin:/bin:/usr/local/games:/usr/games:/home/sanika/.dotnet/tools
POWERSHELL_TELEMETRY_OPTOUT=1
POWERSHELL_UPDATECHECK=Off
PWD=/home/sanika/Documents
QT_ACCESSIBILITY=1
QT_AUTO_SCREEN_SCALE_FACTOR=0
QT_QPA_PLATFORMTHEME=qt5ct
SESSION_MANAGER=local/kali:0/tmp/.ICE-unix/1025,unix/kali:/tmp/.ICE-unix/1025
SHELL=/usr/bin/zsh
SHLVL=1
```


35. Shows real-time process monitoring.

top — Shows real-time system processes, CPU usage, memory usage, and running tasks.

Output:

```
(sanika@kali)-[~/Documents]
$ top
top - 20:09:22 up 1:10, 1 user, load average: 0.15, 0.11, 0.09
Tasks: 272 total, 2 running, 270 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.5 us, 0.4 sy, 0.0 ni, 99.0 id, 0.0 wa, 0.0 hi, 0.1 si, 0.0
MiB Mem : 2498.6 total, 645.7 free, 907.5 used, 1105.9 buff/cache
MiB Swap: 2586.0 total, 2586.0 free, 0.0 used. 1591.1 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU  %MEM     TIME+
36144 sanika    20   0 269796 23544 18204 R   4.6   0.9   0:00.14
  809 root      20   0 408876 126932 78996 S   3.0   5.0   1:31.86
 1259 sanika    20   0 272996 29456 22352 S   0.7   1.2   0:17.62
 1646 sanika    20   0 877136 65804 49676 S   0.7   2.6   0:13.70
   15 root      20   0      0      0      0 I   0.3   0.0   0:12.64
  584 root      20   0   8592   6548   1820 S   0.3   0.3   0:00.90
  604 message+ 20   0  10204   7432   4292 S   0.3   0.3   0:06.89
  705 root      20   0 353140   2956   2692 S   0.3   0.1   0:11.54
 1002 sanika    20   0   9196   5868   4332 S   0.3   0.2   0:01.36
 1097 sanika    20   0 217396 70080  3980 S   0.3   2.7   0:01.71
 1113 sanika    20   0 215612   3364   2956 S   0.3   0.1   0:25.61
 1129 sanika    20   0 215284   3616   3152 S   0.3   0.1   0:03.28
 1183 sanika    20   0 692364 136408 93924 S   0.3   5.3   0:20.73
 1257 sanika    20   0 354496 109440 24388 S   0.3   4.3   0:18.65
34456 root      20   0      0      0      0 I   0.3   0.0   0:00.21
```

36. Displays RAM usage.

free -h — Displays RAM and swap memory usage in a human-readable format.

Output:

```
(sanika@kali)-[~/Documents]
$ free -h
              total        used        free      shared  buff/cache   availa
ble
Mem:          2.4Gi         896Mi         656Mi         7.9Mi         1.1Gi         1.
6Gi
Swap:          2.5Gi           0B          2.5Gi
```

37. Shows disk usage.

df -h — Shows disk space usage of file systems in a human-readable form

Output:

```
(sanika@kali) - [~/Documents]
$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            1.2G   0    1.2G   0% /dev
tmpfs           250M 1020K 249M   1% /run
/dev/sda1       47G   18G   27G  40% /
tmpfs           1.3G  4.0K  1.3G   1% /dev/shm
none            1.0M   0    1.0M   0% /run/credentials/systemd-journald.servi
ce
tmpfs           1.3G  1.2M  1.3G   1% /tmp
none            1.0M   0    1.0M   0% /run/credentials/getty@tty1.service
tmpfs           250M  108K  250M   1% /run/user/1000
```

38. Lists files with detailed information.

ls -l — Lists files and directories with detailed information such as permissions, owner, size, and modification date.

Output:

```
(sanika@kali) - [~/Documents]
$ ls -l
total 988
-rw-rw-r-- 1 sanika sanika    54 Dec 30 15:44 cat
-rw-rw-r-- 1 sanika sanika 992708 Dec 30 03:17 cat.1
-rw-rw-r-- 1 sanika sanika    41 Dec 30 17:51 demo.txt
-rw-r--r-- 1 sanika sanika     0 Dec 30 18:12 file.txt
-rw-rw-r-- 1 sanika sanika     0 Dec 30 19:00 notes.txt
drwxrwxr-x 2 sanika sanika  4096 Dec 30 18:07 testdir
drwxrwxr-x 2 sanika sanika  4096 Dec 30 18:12 work
```

39. Shows users currently logged into the system.

who — Shows users currently logged into the system.

Output:

```
(sanika@kali) - [~/Documents]
$ who
sanika    seat0          2025-12-30 18:58 (:0)
```

40. Shows user ID and group information.

id — Displays the user ID (UID), group ID (GID), and group memberships of the current user.

Output:

```
(sanika@kali)-[~/Documents]
$ id
uid=1000(sanika) gid=1000(sanika) groups=1000(sanika),4(adm),20(dialout),24(cdrom),25(floppy),27(sudo),29(audio),30(dip),44(video),46(plugdev),100(users),101(netdev),103(scanner),116(bluetooth),121(lpadmin),124(wireshark),130(vboxsf),131(kaboxer)
```

41. tree : It is used to display the contents of a directory in a tree-like, hierarchical format, showing files and subdirectories.

Output:

```
(sanika@kali)-[~/Documents]
$ tree
.
├── cat
├── cat.1
├── demo.txt
├── file.txt
├── notes.txt
├── testdir
│   └── file.txt
└── work
    └── file.txt

3 directories, 7 files
```

42. Locates the binary, source, and manual of a command

whereis ls : It is used to locate the binary, source code, and manual page of a command in Linux/Unix.

Output:

```
(sanika@kali)-[~/Documents]
$ whereis ls
ls: /usr/bin/ls /usr/share/man/man1/ls.1.gz

(sanika@kali)-[~/Documents]
$
```

43. Displays a summary of currently logged-in users, their login time, idle time, current processes, and system load.

Command : w

```
(sanika@kali) - [~/Documents]
$ w
20:25:52 up 1:27, 1 user, load average: 0.13, 0.14, 0.10
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
sanika    -                18:58            0.00s   0.01s  lightdm --se
```

44. ls --help : The ls command is used to list the contents of a directory (files and folders) in Linux/Unix systems.

Adding the --help option displays a help message that shows all available options and how to use the ls command.

Command : ls --hel

Output:

```
(sanika@kali) - [~/Documents]
$ ls --help
Usage: ls [OPTION]... [FILE]...
List information about the FILEs (the current directory by default).
Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.

Mandatory arguments to long options are mandatory for short options too.
-a, --all                        do not ignore entries starting with .
-A, --almost-all               do not list implied . and ..
--author                        with -l, print the author of each file
-b, --escape                    print C-style escapes for nongraphic characters
--block-size=SIZE              with -l, scale sizes by SIZE when printing them;
                               e.g., '--block-size=M'; see SIZE format below

-B, --ignore-backups            do not list implied entries ending with ~
-c                              with -lt: sort by, and show, ctime (time of last
                               change of file status information);
                               with -l: show ctime and sort by name;
                               otherwise: sort by ctime, newest first

-C                              list entries by columns
--color[=WHEN]                 color the output WHEN; more info below
-d, --directory                list directories themselves, not their contents
-D, --dired                    generate output designed for Emacs' dired mode
-f                              same as -a -U
-F, --classify[=WHEN]         append indicator (one of */=>@|) to entries WHEN
--file-type                    likewise, except do not append '*'
```

45. To Exit the Terminal

exit : This command is used to close the current terminal session or log out from the current shell.

Output:

A screenshot of a terminal window with a dark background. The prompt is `(sanika@kali)~` in blue text. Below the prompt, the command `$ exit` is entered in blue text, followed by a white cursor. The terminal window has a faint, stylized graphic of a laptop and keyboard in the background.

```
(sanika@kali)~  
$ exit
```