

Commands on Kali Linux

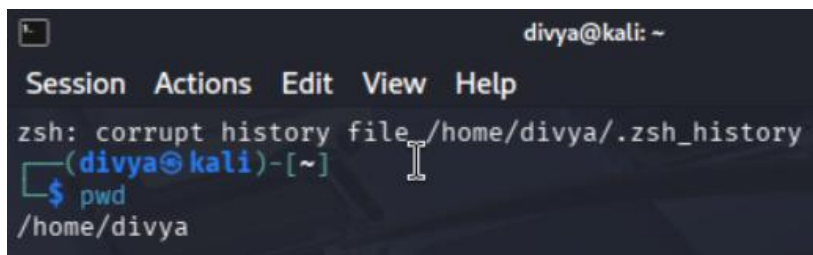
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Intern No:2043

Task1:(Kali Linux -command)

1.To display present working directory

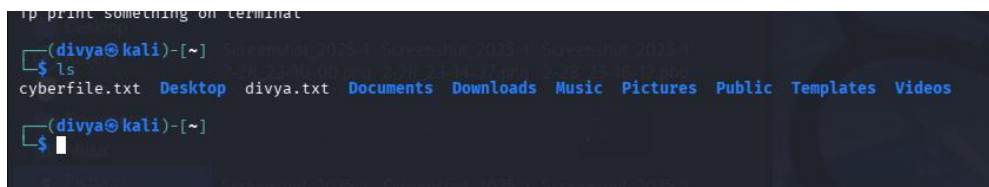
Command: pwd

A terminal window with a dark background. The title bar shows a window icon and the text 'divya@kali: ~'. The menu bar contains 'Session', 'Actions', 'Edit', 'View', and 'Help'. The terminal text shows a message 'zsh: corrupt history file /home/divya/.zsh_history' followed by the prompt '(divya@kali)-[~]'. The user enters the command '\$ pwd' and the output is '/home/divya'.

This command will display the current directory you are in.

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

Command: ls

A terminal window with a dark background. The title bar shows a window icon and the text 'divya@kali: ~'. The menu bar contains 'Session', 'Actions', 'Edit', 'View', and 'Help'. The terminal text shows the prompt '(divya@kali)-[~]'. The user enters the command '\$ ls' and the output is a list of files and directories: 'cyberfile.txt Desktop divya.txt Documents Downloads Music Pictures Public Templates Videos'.

This command will display the list of files and directories in the current directory.

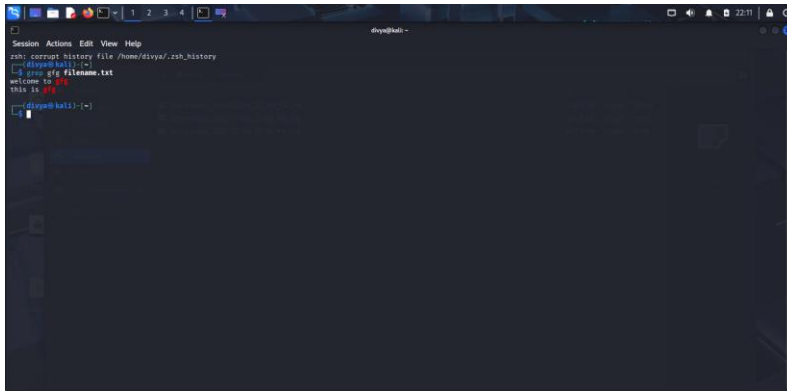
3. To change the current working directory

Command: cd

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

4. Search for a Word in a File

Command: grep keyword filename

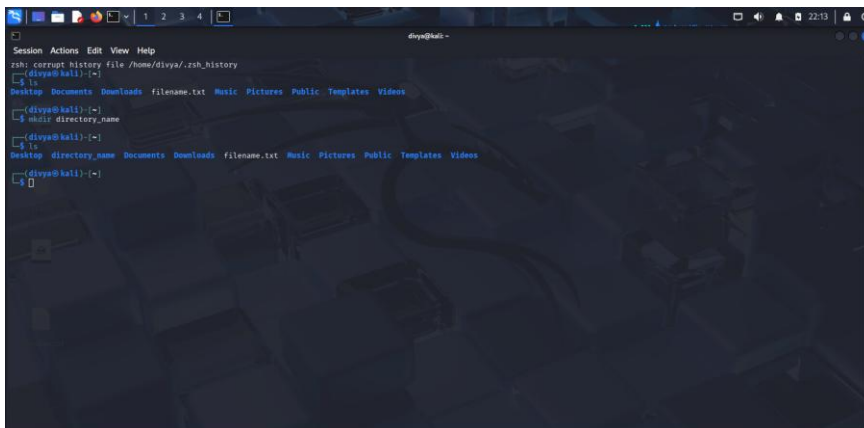


```
Session Actions Edit View Help
zsh: corrupt history file /home/divya/.zsh_history
~(divya@kali) ~
$ grep welcome filename.txt
welcome to Kali
this is Kali
~(divya@kali) ~
```

This command searches for a specific keyword or pattern inside a file and displays matching lines.

5.To create a new directory

Command: `mkdir directory_name`

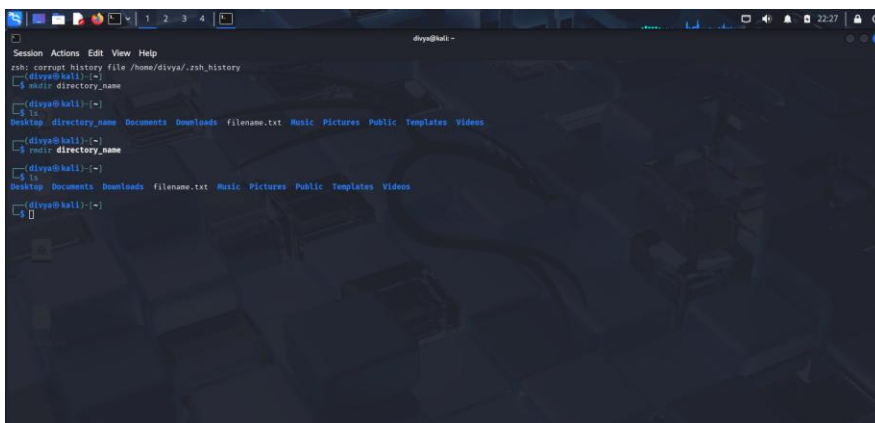


```
Session Actions Edit View Help
zsh: corrupt history file /home/divya/.zsh_history
~(divya@kali) ~
$ ls
Desktop Documents Downloads filename.txt Music Pictures Public Templates Videos
~(divya@kali) ~
$ mkdir directory_name
~(divya@kali) ~
$ ls
Desktop directory_name Documents Downloads filename.txt Music Pictures Public Templates Videos
~(divya@kali) ~
```

This command will create a new directory in the current folder with the name `directory_name`.

6. To remove a directory

Command: `rmdir directory_name`

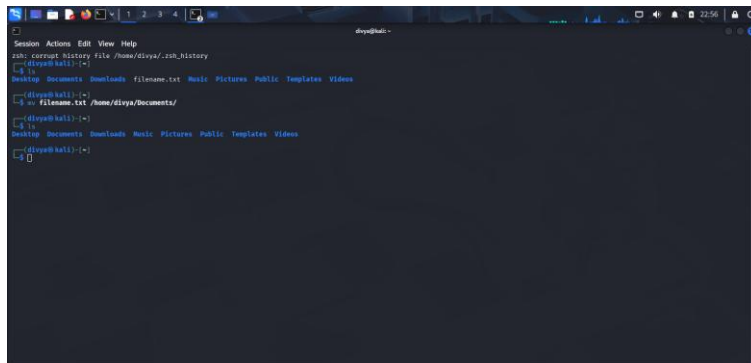


```
Session Actions Edit View Help
zsh: corrupt history file /home/divya/.zsh_history
~(divya@kali) ~
$ mkdir directory_name
~(divya@kali) ~
$ ls
Desktop directory_name Documents Downloads filename.txt Music Pictures Public Templates Videos
~(divya@kali) ~
$ rmdir directory_name
~(divya@kali) ~
$ ls
Desktop Documents Downloads filename.txt Music Pictures Public Templates Videos
~(divya@kali) ~
```

This command will remove the directory with the name `directory_name` from the current directory.

7.To move a file

Command: mv source destination

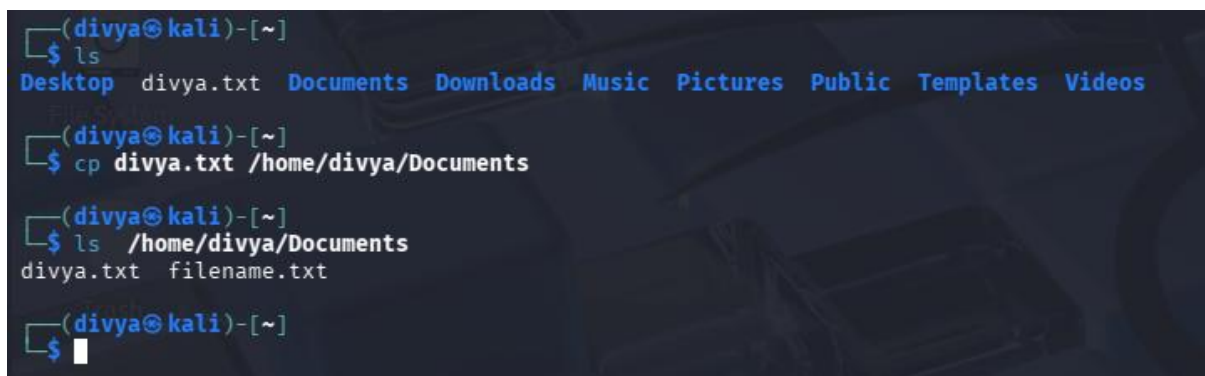
A terminal window titled 'divya@kali' showing a sequence of commands to move a file. The user first runs 'ls' to list files in the home directory, showing 'Desktop', 'divya.txt', 'Documents', 'Downloads', 'Music', 'Pictures', 'Public', 'Templates', and 'Videos'. Then, they run 'mv divya.txt /home/divya/Documents/'. A second 'ls' command confirms the file's new location in the Documents directory.

```
(divya@kali)~  
$ ls  
Desktop divya.txt Documents Downloads Music Pictures Public Templates Videos  
(divya@kali)~  
$ mv divya.txt /home/divya/Documents/  
(divya@kali)~  
$ ls /home/divya/Documents  
divya.txt filename.txt  
(divya@kali)~  
$
```

This command is used to move a file from one location to another.

8.To copy a file

Command: cp source destination

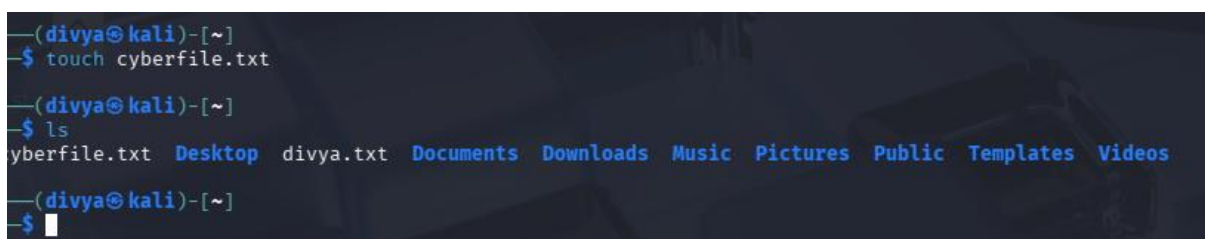
A terminal window titled 'divya@kali' showing the process of copying a file. The user runs 'ls' to see 'divya.txt' in the home directory. Then, they execute 'cp divya.txt /home/divya/Documents'. A subsequent 'ls' command in the Documents directory shows both 'divya.txt' and 'filename.txt', indicating a successful copy.

```
(divya@kali)~  
$ ls  
Desktop divya.txt Documents Downloads Music Pictures Public Templates Videos  
(divya@kali)~  
$ cp divya.txt /home/divya/Documents  
(divya@kali)~  
$ ls /home/divya/Documents  
divya.txt filename.txt  
(divya@kali)~  
$
```

This command will copy the file from the source to the destination.

9. To create a new file

Command: touch filename

A terminal window titled 'divya@kali' showing the creation of a new file. The user runs 'touch cyberfile.txt'. Then, they run 'ls' to verify the file's creation, with the output listing 'cyberfile.txt' alongside other files in the home directory.

```
(divya@kali)~  
$ touch cyberfile.txt  
(divya@kali)~  
$ ls  
cyberfile.txt Desktop divya.txt Documents Downloads Music Pictures Public Templates Videos  
(divya@kali)~  
$
```

This command will create a new file with the name "filename".

10.To display manual of a command

Command: man ls

This command is used to display the details of the network interfaces connected to the system.

13. To download a file

Command: `wget link_to_file`

```
(divya@kali)-[~]
$ wget https://pixabay.com/photos/
--2025-12-28 23:14:16-- https://pixabay.com/photos/
Resolving pixabay.com (pixabay.com)... 172.64.147.160, 104.18.40.96, 2a06:98c1:3107::6812:2860, ...
Connecting to pixabay.com (pixabay.com)|172.64.147.160|:443 ... connected.
HTTP request sent, awaiting response... 403 Forbidden
2025-12-28 23:14:16 ERROR 403: Forbidden.

(divya@kali)-[~]
$ ls
cyberfile.txt Desktop divya.txt Documents Downloads Music Pictures Public Templates Videos

(divya@kali)-[~]
```

This command will download the file from the link entered in the command.

14. To install a package

Command: `sudo apt install package_name`

```
(divya@kali)-[~]
$ ls
cyberfile.txt Desktop divya.txt Documents Downloads

(divya@kali)-[~]
$ sudo apt install netcat
[sudo] password for divya:
Package netcat is a virtual package provided by:
  netcat-traditional 1.10-50.1
  netcat-openbsd 1.234-1
You should explicitly select one to install.
```

`sudo apt install netcat`

This command is used to install the mentioned package in the system.

15. To remove a package

Command: `sudo apt remove package_name`

```
(divya@kali)-[~]
$ sudo apt remove netcat
Virtual packages like 'netcat' can't be removed
The following packages were automatically installed and are no longer required:
  curlftpfs libavfilter10 libavformat61 libconfig-inifiles-perl libfuse2t64 lib...
Use 'sudo apt autoremove' to remove them.

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

(divya@kali)-[~]
$
```

`sudo apt remove netcat`

This command will remove the mentioned package from the system.

16. To upgrade packages in the system

Command: `sudo apt upgrade`

```

Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 0


```

This command will upgrade all the packages in the system.

17. To fetch the packages updates

Command: `sudo apt update`

```

Session Actions Edit View Help
zsh: corrupt history file /home/divya/.zsh_history


```

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

18.To get the current username

Command: `whoami`

```



```

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

19.To change the current user to superuser or root

Command: `sudo su`

```

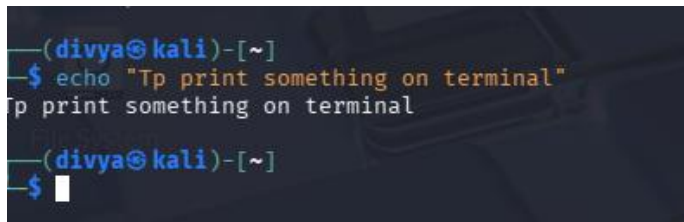


```

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

20. Print Text on the Terminal

Command: echo " To print something on terminal"

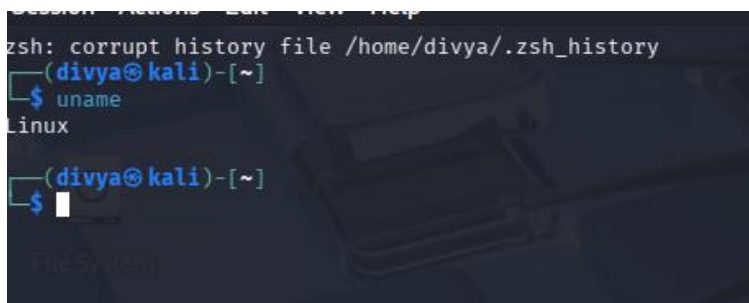


```
(divya@kali)-[~]  
$ echo "Tp print something on terminal"  
Tp print something on terminal  
  
(divya@kali)-[~]  
$
```

The command will print the mentioned text on the terminal.

21. uname

Command: uname



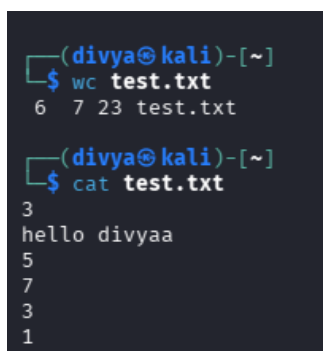
```
zsh: corrupt history file /home/divya/.zsh_history  
(divya@kali)-[~]  
$ uname  
Linux  
  
(divya@kali)-[~]  
$
```

The uname command in Linux is used to display system information.

- Shows operating system details.
- Helps identify the system.

22. wc

Command: wc file_name



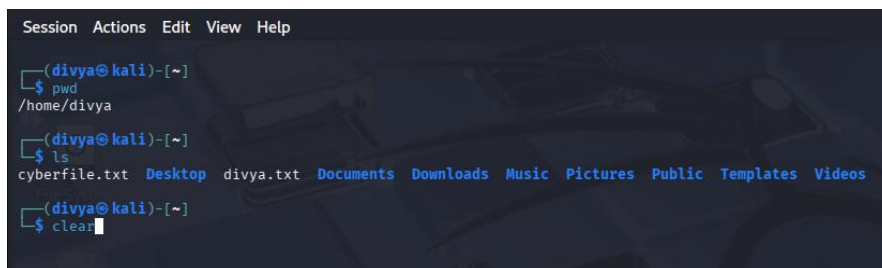
```
(divya@kali)-[~]  
$ wc test.txt  
6 7 23 test.txt  
  
(divya@kali)-[~]  
$ cat test.txt  
3  
hello divyaa  
5  
7  
3  
1
```

The wc command in Linux is used to count words, lines, and characters.

- Counts file statistics.
- Useful for text analysis

23. Clear

Command: clear

A terminal window with a dark background and light blue text. The prompt is (divya@kali)-[~]. The user enters 'pwd' and the output is '/home/divya'. The user enters 'ls' and the output is 'cyberfile.txt Desktop divya.txt Documents Downloads Music Pictures Public Templates Videos'. The user enters 'clear' and the screen is cleared.

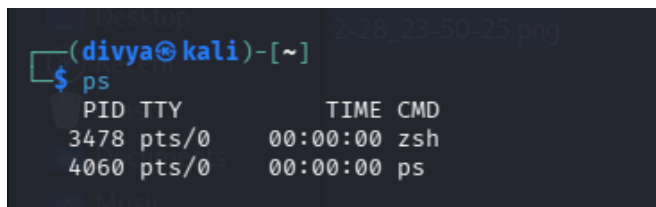
```
(divya@kali)-[~]  
$ pwd  
/home/divya  
(divya@kali)-[~]  
$ ls  
cyberfile.txt Desktop divya.txt Documents Downloads Music Pictures Public Templates Videos  
(divya@kali)-[~]  
$ clear
```

The clear command in Linux is used to clear the terminal screen.

- Removes previous outputs.
- Keeps the terminal clean.

24.ps

Command: ps

A terminal window with a dark background and light blue text. The prompt is (divya@kali)-[~]. The user enters 'ps' and the output is a table of running processes.

```
(divya@kali)-[~]  
$ ps  
PID TTY          TIME CMD  
3478 pts/0        00:00:00 zsh  
4060 pts/0        00:00:00 ps
```

The ps command in Linux is used to display running processes.

- Shows active processes.
- Helps monitor system activity.

25.sort

Command: sort file_name

A terminal window with a dark background and light blue text. The prompt is (divya@kali)-[~]. The user enters 'cat test.txt' and the output is '3
hello divyaa
5
7
3
1'. The user enters 'sort test.txt' and the output is '1
3
3
5
7
hello divyaa'.

```
(divya@kali)-[~]  
$ cat test.txt  
3  
hello divyaa  
5  
7  
3  
1  
(divya@kali)-[~]  
$ sort test.txt  
1  
3  
3  
5  
7  
hello divyaa
```

The sort command in Linux is used to sort file contents.

- Sorts data alphabetically.
- Supports numeric sorting.

26.cal

Command: cal

```
(divya@kali)-[~]
$ cal
December 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
```

The cal command in Linux is used to display the calendar.

- Shows month calendar.
- Useful for date reference.

27.whereis

Command: whereis command_name

```
Session Actions Edit View Help
zsh: corrupt history file /home/divya/.zsh_history
(divya@kali)-[~]
$ whereis ls
ls: /usr/bin/ls /usr/share/man/man1/ls.1.gz
(divya@kali)-[~]
$
```

The whereis command in Linux is used to locate command files.

- Shows binary location.
- Finds command paths.

28.df

Command: df [options]

```
Session Actions Edit View Help
zsh: corrupt history file /home/divya/.zsh_history
(divya@kali)-[~]
$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            2.2G   0    2.2G   0% /dev
tmpfs           464M 1012K  463M   1% /run
/dev/sda1       24G   16G   6.7G  70% /
tmpfs           2.3G  4.0K   2.3G   1% /dev/shm
none            1.0M   0    1.0M   0% /run/credentials/systemd-journald.service
tmpfs           2.3G  8.0K   2.3G   1% /tmp
Cybersecurity   476G  220G  257G  47% /media/sf_Cybersecurity
none            1.0M   0    1.0M   0% /run/credentials/getty@tty1.service
tmpfs           464M 108K   464M   1% /run/user/1000
(divya@kali)-[~]
$
```

The `df` command in Linux is used to display disk space usage.

- Shows file system usage.
- Helps monitor storage.

29.NSlookup

Command: `nslookup [domain_name]`

```
1

```

Nslookup (stands for “Name Server Lookup”) is a useful command for getting information from the DNS server. It is a network administration tool for querying the Domain Name System (DNS) to obtain domain name or IP address mapping or any other specific DNS record. It is also used to troubleshoot DNS-related problems.

30.Traceroute

Command: `traceroute[domain_name]`

```
zsh: corrupt history file /home/divya/.zsh_history

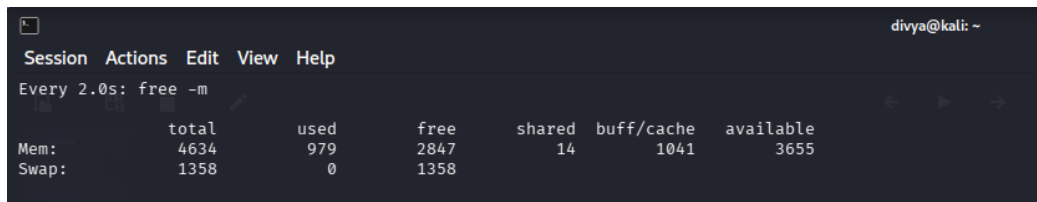
```

The `traceroute` command in Linux is a network diagnostic tool used to track the path that data packets take from your computer to a destination. It sends packets across the internet and shows you every "hop" (router or server) it passes through along the way, as well as how long each step takes.

31.Watch

Command: `watch [option] command`

Example: `watch -d free -m`



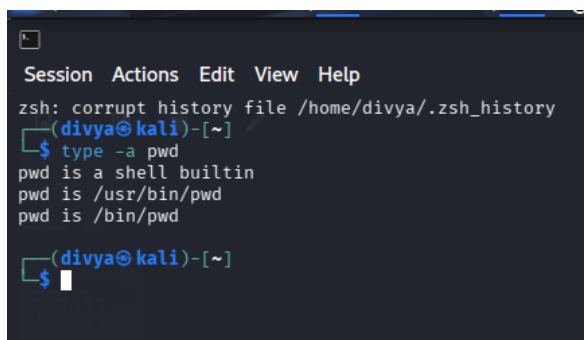
	total	used	free	shared	buff/cache	available
Mem:	4634	979	2847	14	1041	3655
Swap:	1358	0	1358			

This option highlights the differences between successive updates. The options will be going to read the optional argument which changes highlight to be permanent, allowing the user to see what has changed at least once since the first iteration.

32.Type

Command : type [option] command_name

Example: type -a pwd



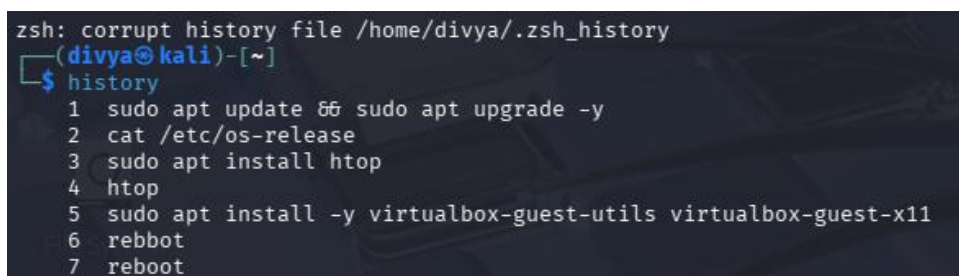
```

zsh: corrupt history file /home/divya/.zsh_history
(divya@kali)~$ type -a pwd
pwd is a shell builtin
pwd is /usr/bin/pwd
pwd is /bin/pwd

```

The **type** command in Linux is a useful utility for identifying how the shell will interpret a given command. It provides information on whether a command is a shell built-in, external binary, function, or alias, helping users understand the source of the command and its behavior.

33.history



```

zsh: corrupt history file /home/divya/.zsh_history
(divya@kali)~$ history
1  sudo apt update && sudo apt upgrade -y
2  cat /etc/os-release
3  sudo apt install htop
4  htop
5  sudo apt install -y virtualbox-guest-utils virtualbox-guest-x11
6  rebbot
7  reboot

```

Displays a list of previously executed commands in the terminal and helps users quickly reuse or review past commands.

34.tree

Command : tree

```
(divya@kali)-[~]
$ tree
.
├── cyberfile.txt
├── Desktop
├── divya.txt
├── Documents
│   ├── divya.txt
│   └── filename.txt
├── Downloads
├── Music
├── Pictures
│   ├── Screenshot_2025-12-29_13-06-19.png
│   ├── Screenshot_2025-12-29_13-08-34.png
│   ├── Screenshot_2025-12-29_13-16-34.png
│   ├── Screenshot_2025-12-29_13-26-27.png
│   ├── Screenshot_2025-12-29_13-35-28.png
│   ├── Screenshot_2025-12-29_13-39-30.png
│   ├── Screenshot_2025-12-29_13-42-43.png
│   └── Screenshot_2025-12-29_13-50-21.png
├── Public
├── Templates
├── test.txt
└── Videos

9 directories, 13 files
```

The tree command in Linux displays the directory structure in a hierarchical, tree-like format, providing a clear visual representation of files and subdirectories.

- tree command helps visualize the organization of the filesystem.
- It can include hidden files and limit the depth of display.
- Useful for quickly analyzing complex directory structures.

35.finger

Command : finger [name]

```
(divya@kali)-[~]
$ finger divya
Login: divya                      Name: Divya Bhogle
Directory: /home/divya           Shell: /usr/bin/zsh
Never logged in.
No mail.
No Plan.
```

The finger command is a user information lookup utility in Linux that displays details about users currently logged into the system. It is not installed by default in Kali Linux (a Debian-based distribution) but can be easily added.

36.IP route

```
(divya@kali)-[~]
$ ip route
default via 192.168.0.1 dev eth0 proto dhcp src 192.168.0.109 metric 100
192.168.0.0/24 dev eth0 proto kernel scope link src 192.168.0.109 metric 100
```

The ip route command (often abbreviated as ip r) is the modern and recommended way to view and manipulate the IP routing table in Kali Linux. The older route command is considered deprecated but can still be installed and used if necessary.

37.Last

```



```

In Kali Linux, the term "last command" can refer to two different things: a specific system utility command called `last`, or the most recently executed command in your terminal history

38.lsbblk

```



```

The `lsblk` command in Kali Linux (and other Linux distributions) is a utility used to **list information about all available block devices**. It presents the information in a tree-like format by default, making it easy to visualize the relationships between physical disks and their partitions.

