

Week 2: Linux Fundamentals.

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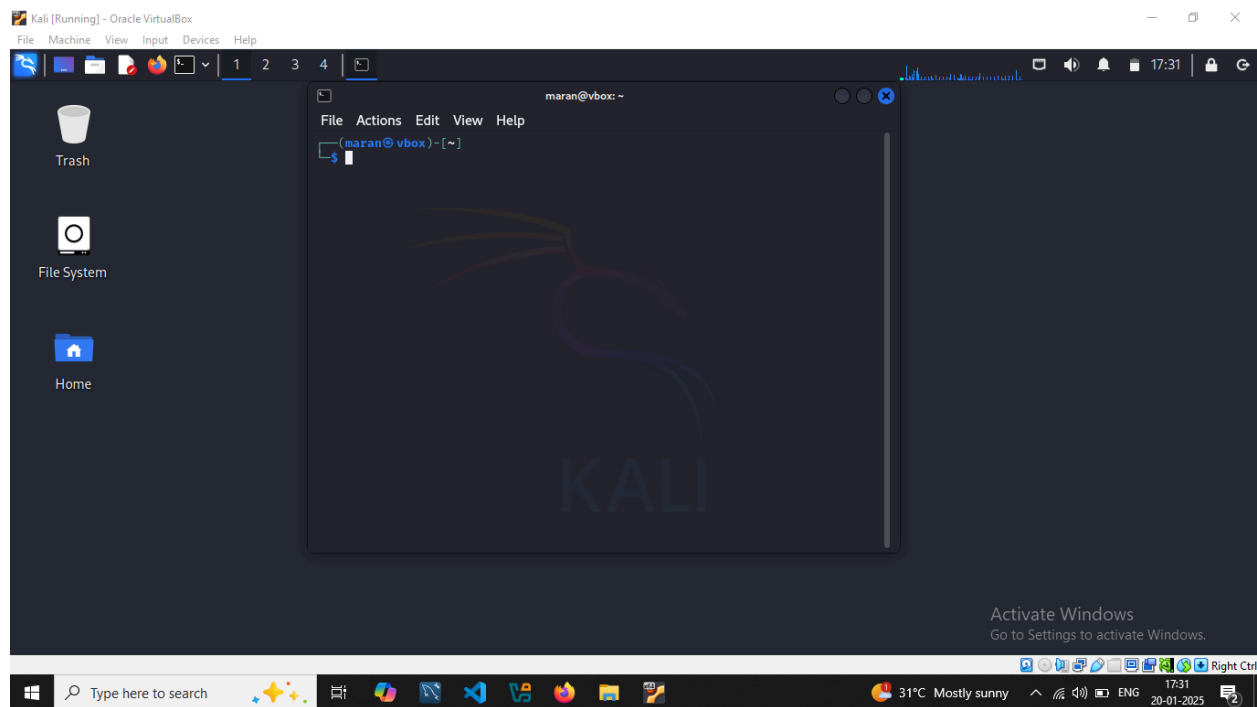
Email: mathimaranms0@gmail.com

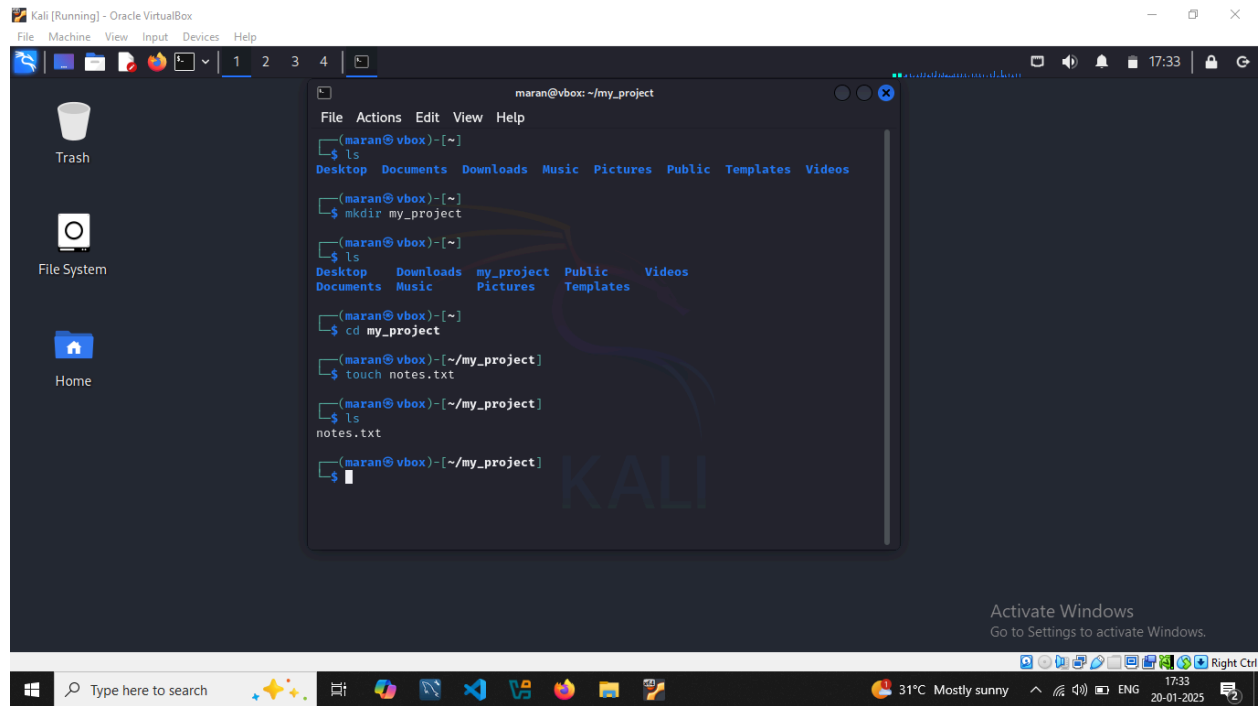
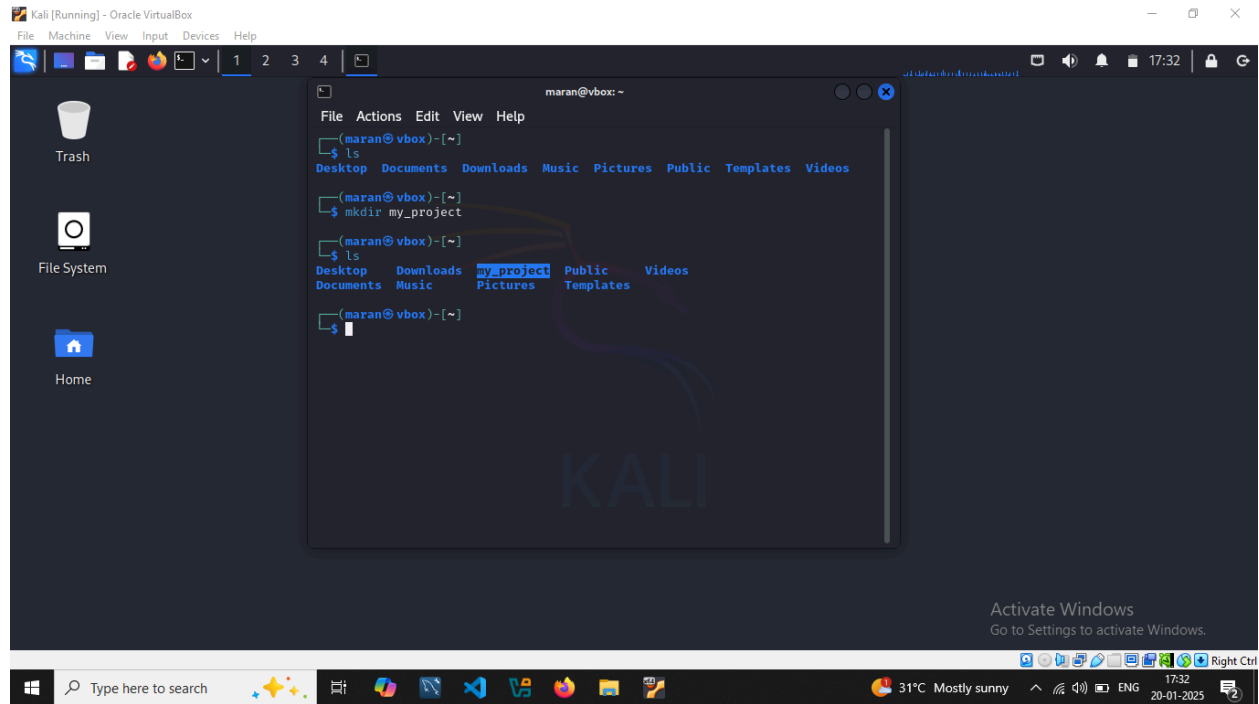
Steps:

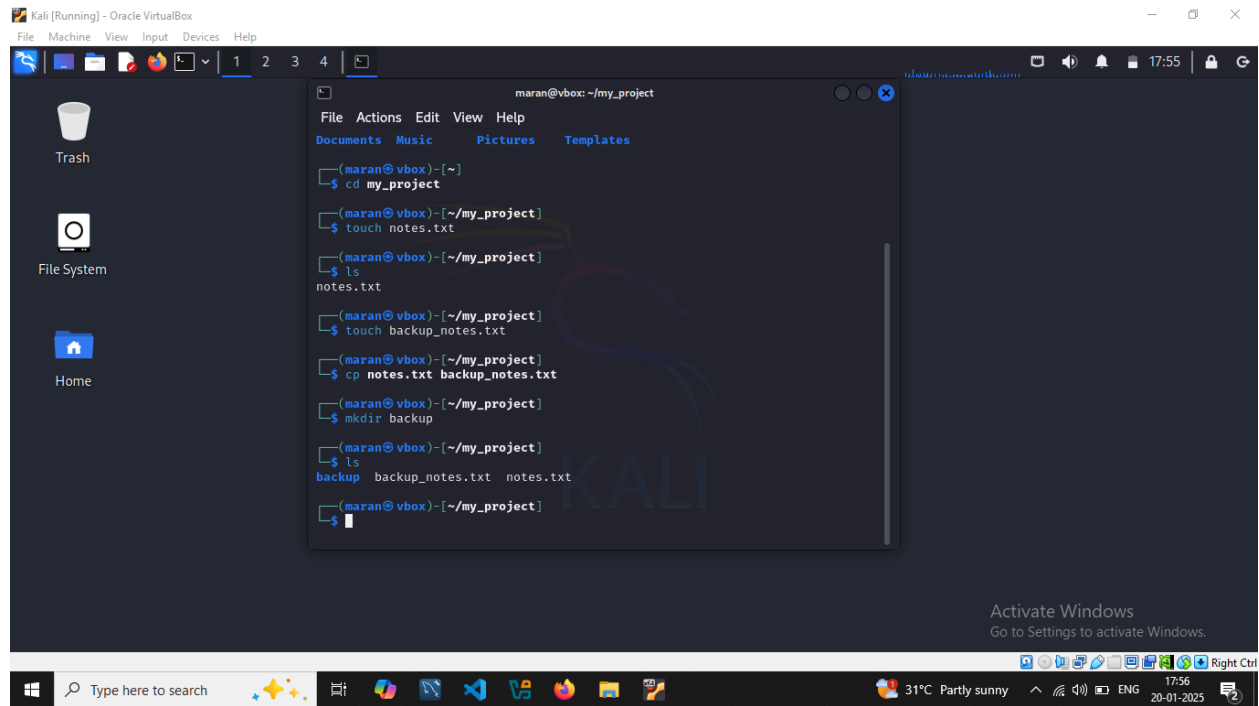
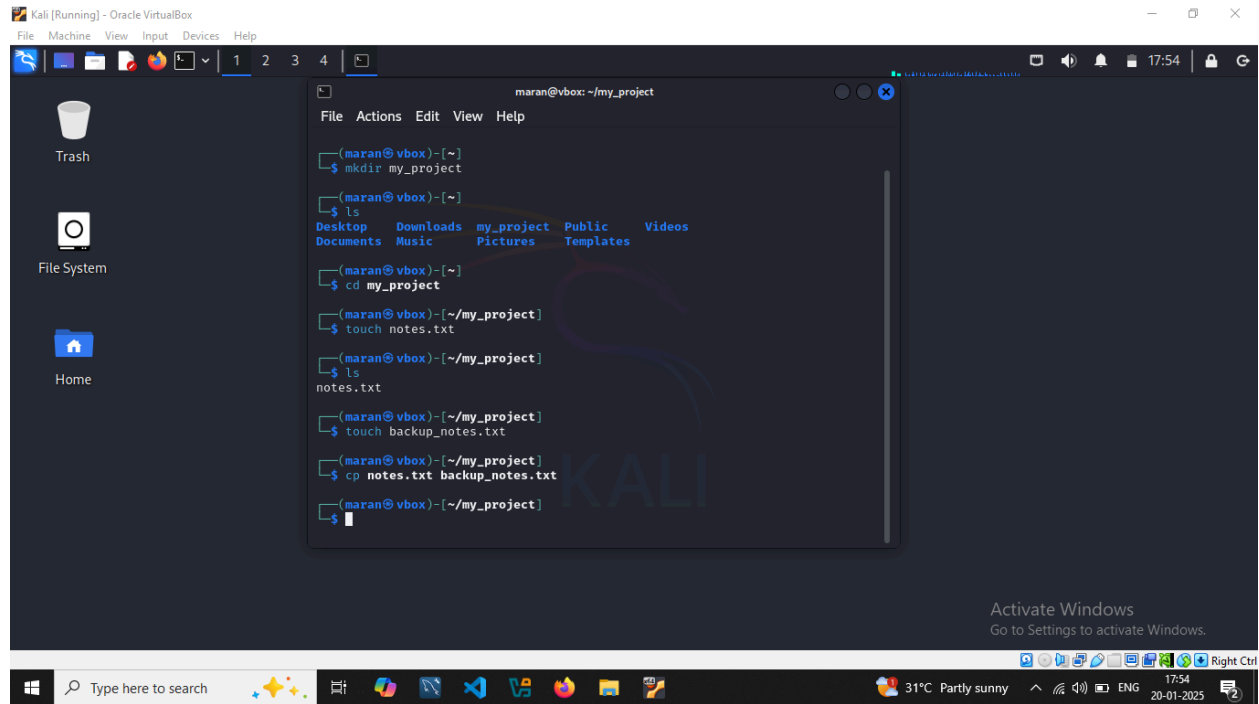
1. Opened virtualbox and started kali linux, Opening Terminal of kali linux.
2. Viewing the directory list with `ls` command, creating a new directory named `my_project` with `mkdir` command.
3. Again viewing the directory list with `ls` command, Navigating to `my_project` directory with `cd` command, Creating a new empty file `notes.txt` in the `my_project` directory using `touch` command.
4. Viewing the file list with `ls` command, Creating a new empty file `backup_notes.txt` in the `my_project` directory using `touch` command, Coping `notes.txt` to `backup.txt` using `cp` command.
5. Creating a new sub directory `backup` in the main directory `my_project` with `mkdir` command, Viewing the directory, file list with `ls` command.
6. Moving `backup_notes.txt` file to the sub directory `backup` with using `mv` command.
7. Viewing the directory list with `ls` command, Navigating to sub directory `backup`, again viewing the file list with `ls` command to see `backup_notes.txt`.
8. Coming back to the main directory `my_project` using `cd ..` command, using command `rm -r backup` to delete the sub directory `backup`.
9. Creating shell script file `script.sh` using `touch` command, using `chmod 500 script.sh` command to grant it executable permissions, it is readable and executable only by the file owner.
10. Updating my kali using `sudo apt update`, using the command `sudo apt install htop` to install the `htop` package.
11. Verified the installation of `htop` package and using the command `sudo apt remove htop` to remove/uninstall the `htop` package.
12. Checking all running processes with `ps -e` command and identified specific process PID 1266 CMD agent.
13. Terminated the process with command `kill 1266` to kill the process agent, again checking all running processes with `ps -e` command specific process PID 1266 CMD agent is not there.
14. Displaying my ip address with the `ifconfig` command.
15. Verify the connectivity pinging `google.com` using the `ping` command.
16. Listing down all the active network connections with `netstat -a` command.
17. Switching to root terminal with `sudo su` command to add a new user named `testuser` with a command `adduser` switched to user `testuser`.

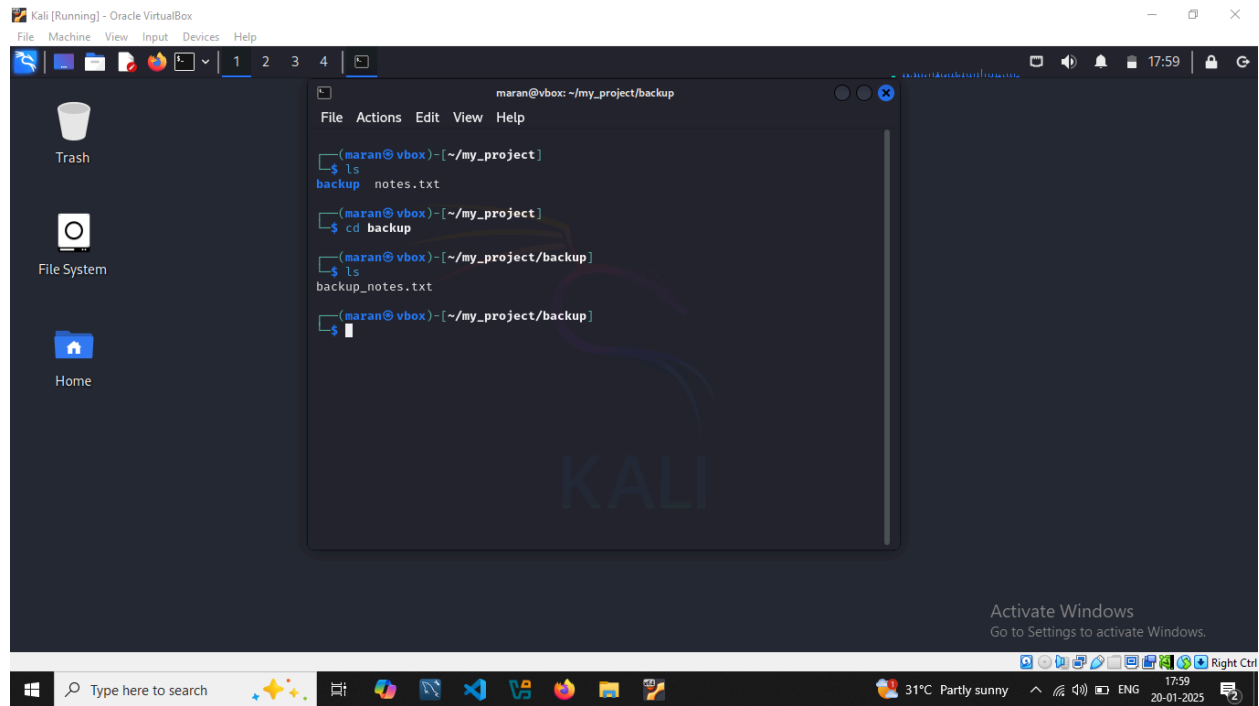
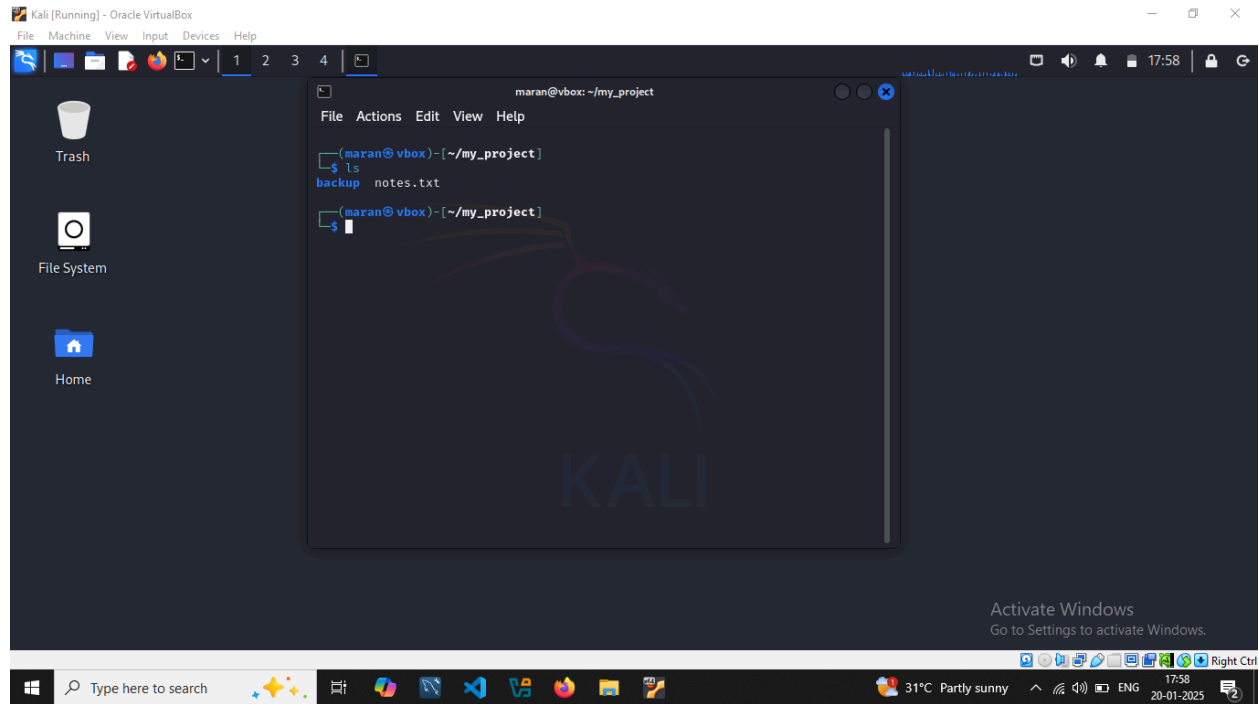
18. Using `usermod -aG sudo testuser` to grant the user `testuser` sudo permissions, tested it with `whoami` command and got an output as `root`.
19. Navigating to `my_project` directory and writing a shell script for "hello world", the command is `echo "hello world" >>hello.sh` saved the script as `hello.sh`, opened the script file with `cat` command the output is `hello world`.
20. Creating a tarball of the `my_project` directory with the command line `tar -cf myproject.tar my_project/`, checking it with `ls` command to see the tar file `myproject.tar`.
21. Compressing the `myproject.tar` file with `gzip` command, checking it with `ls` command to see the compressed tar file `myproject.tar.gz`.
22. Using `tar -zxvf myproject.tar.gz` command to extract `myproject.tar.gz` file the output files are `my_project/`, `my_project/hello.sh`, `my_project/notes.txt`, `my_project/script.sh`.
23. Using the `df` command to check disk space.
24. Using the `free` command to check memory usage.
25. Using the `lscpu` command to check CPU information.

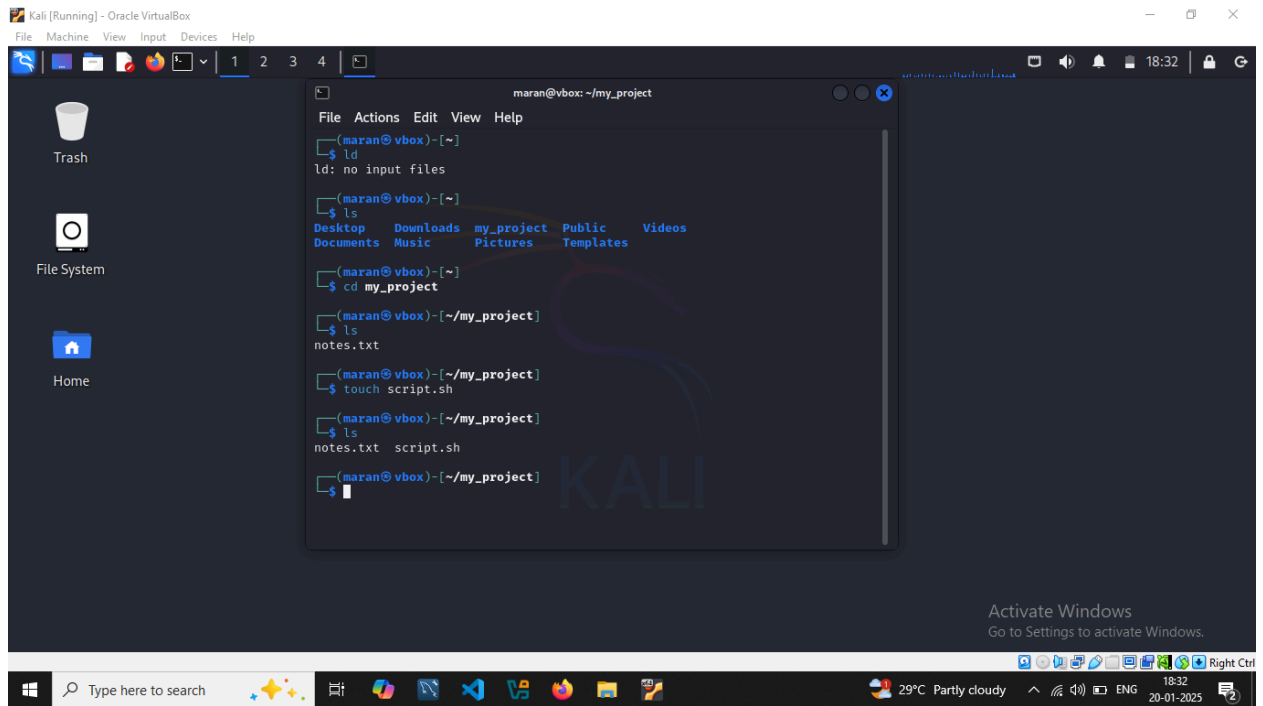
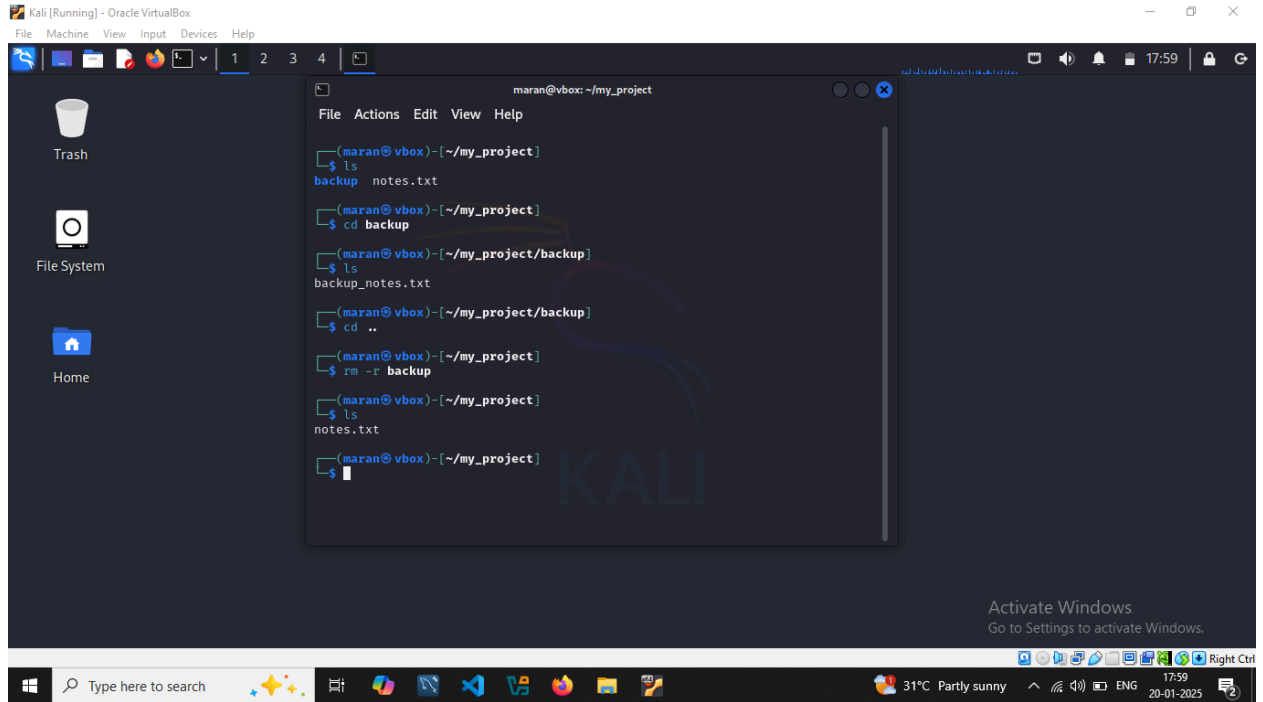
Screenshots:

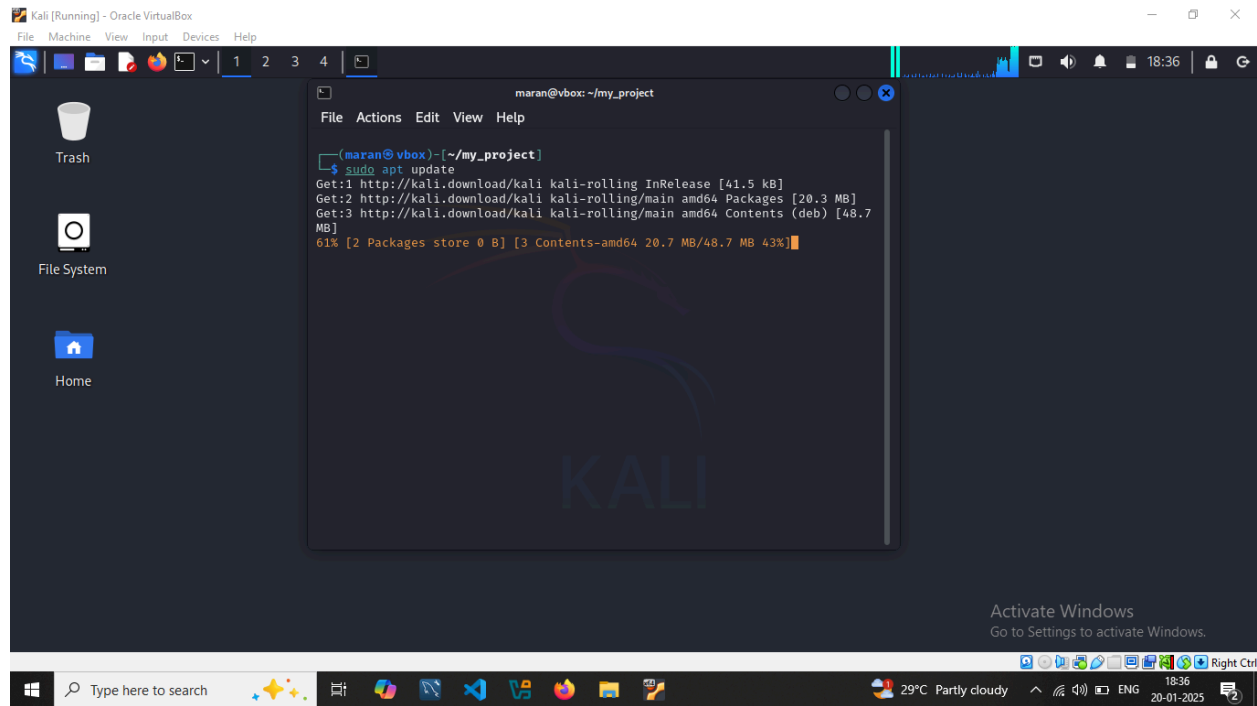
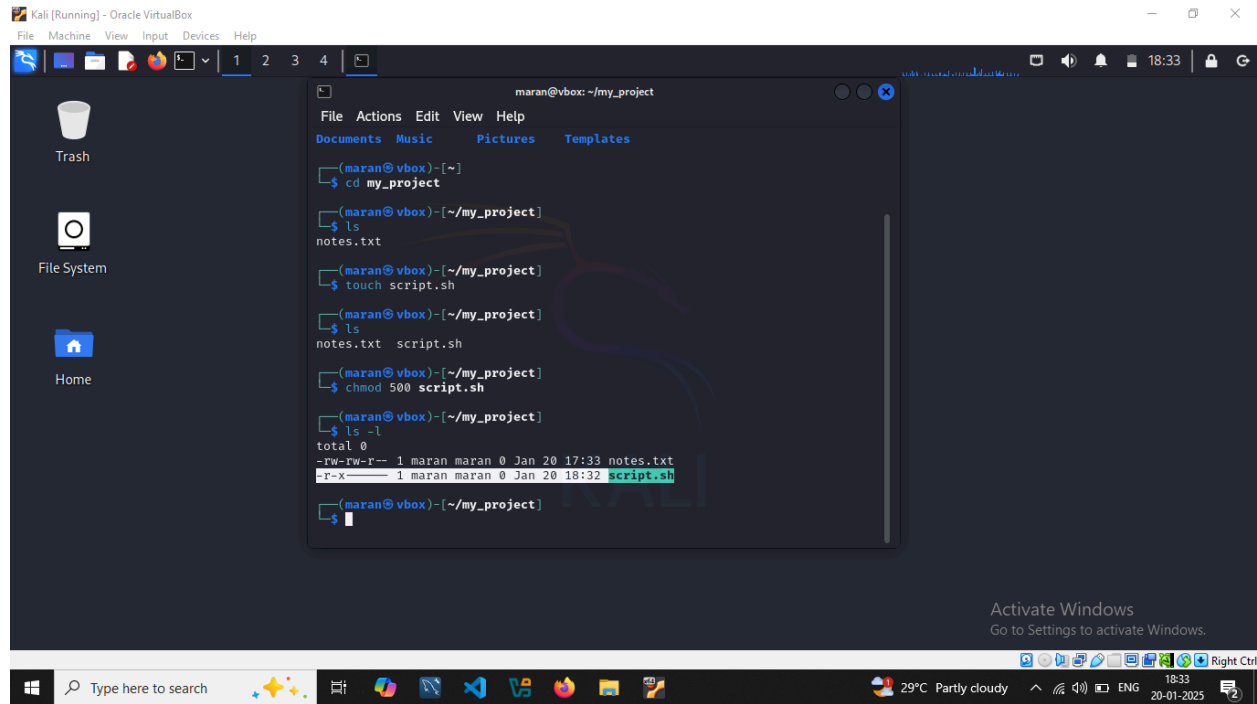


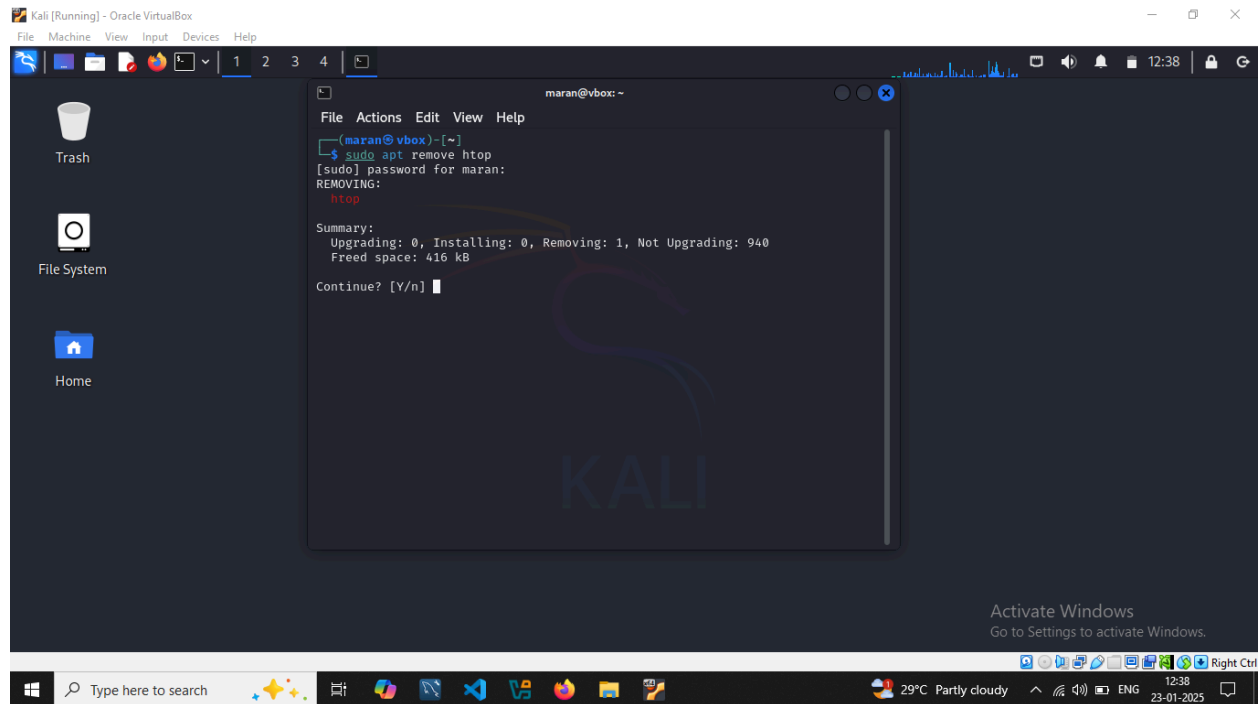
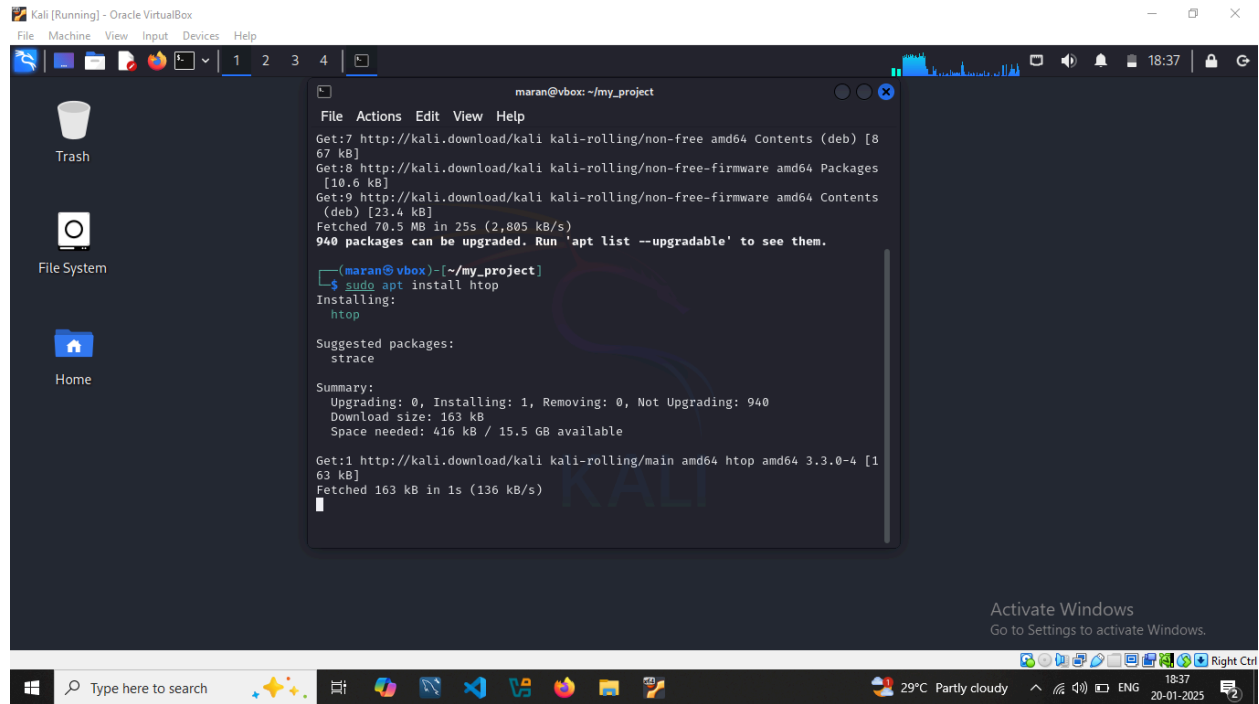


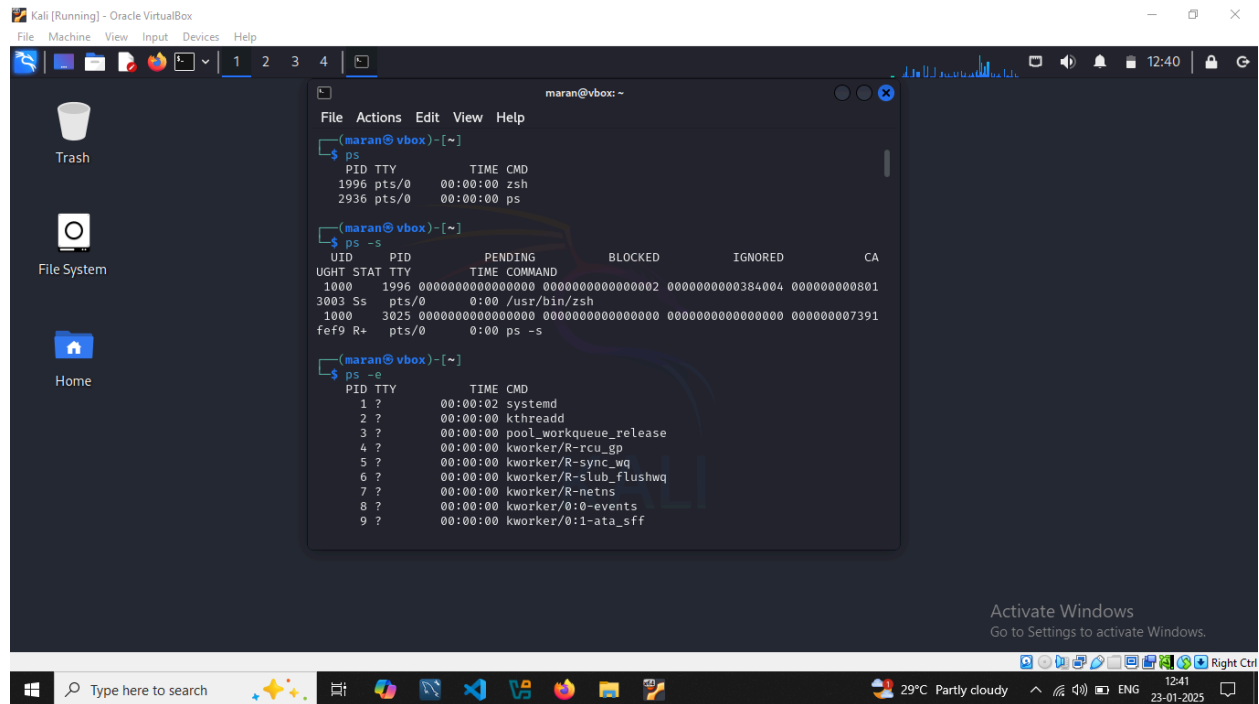
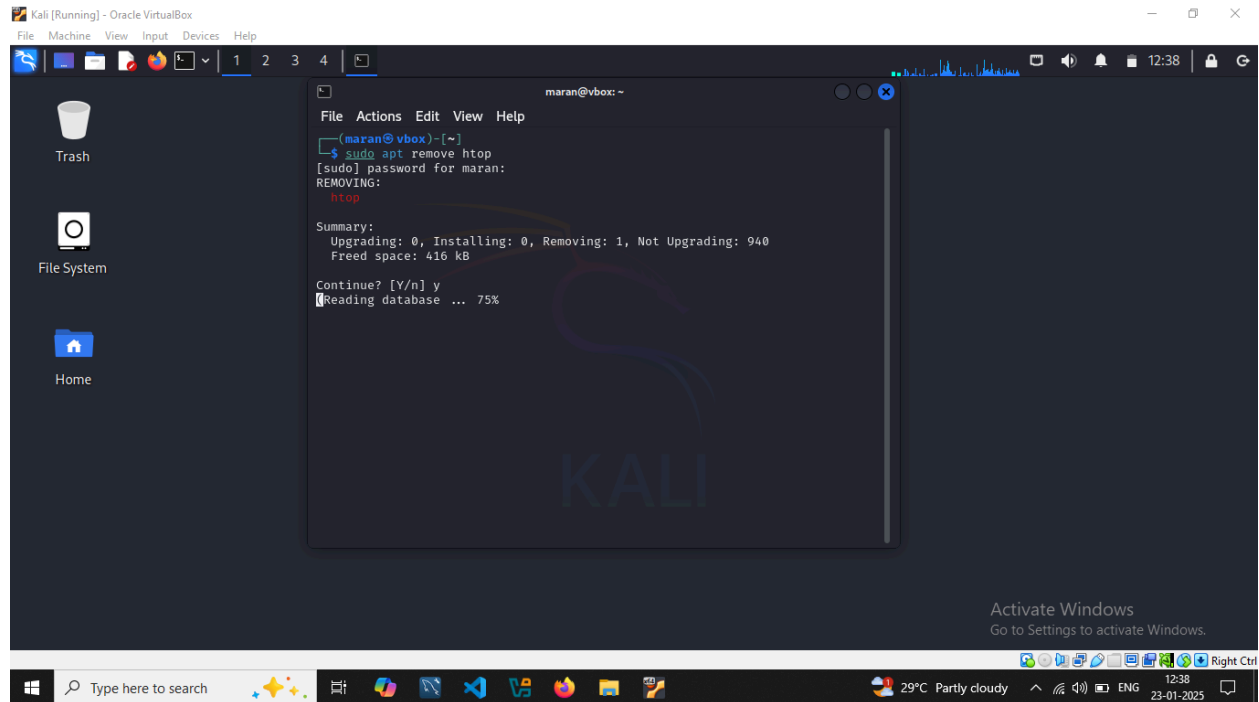


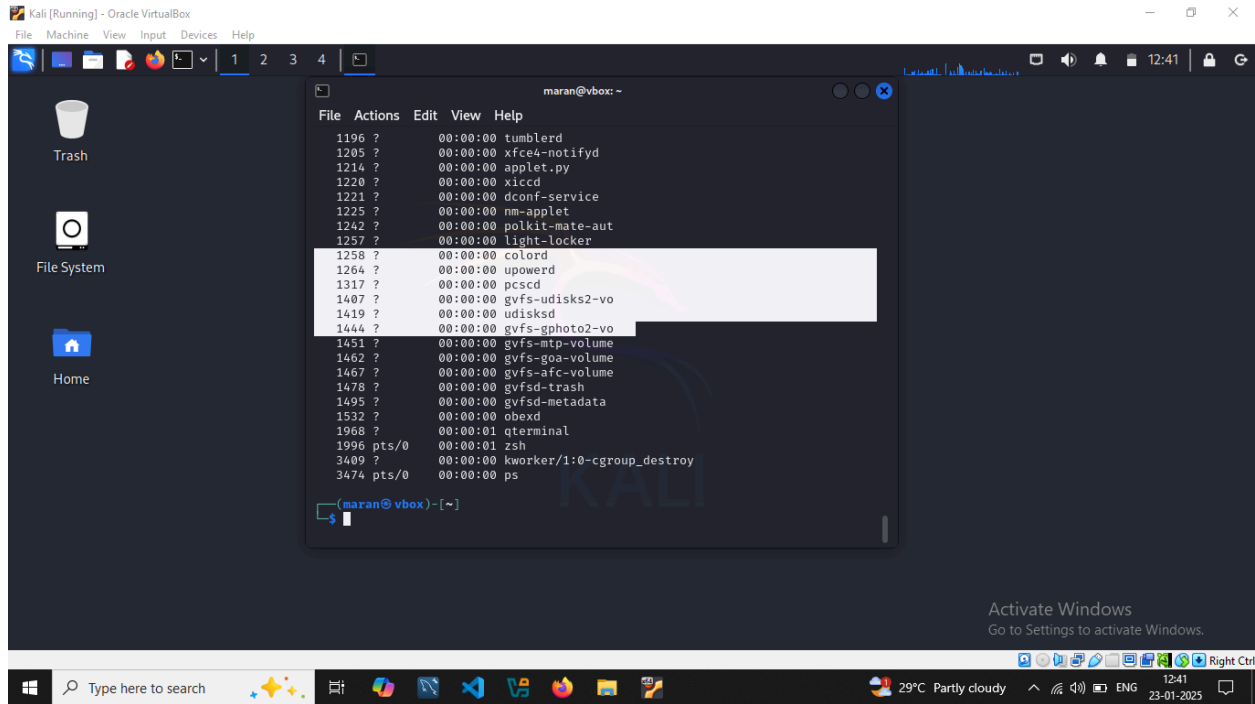
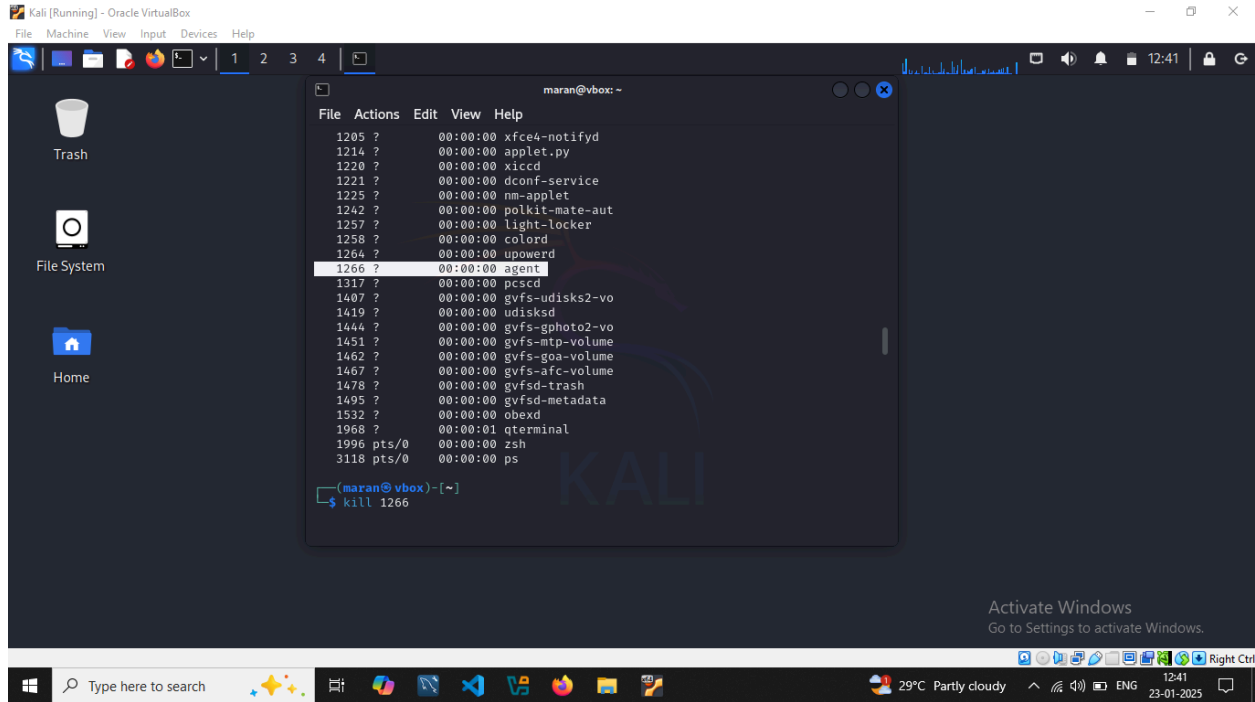


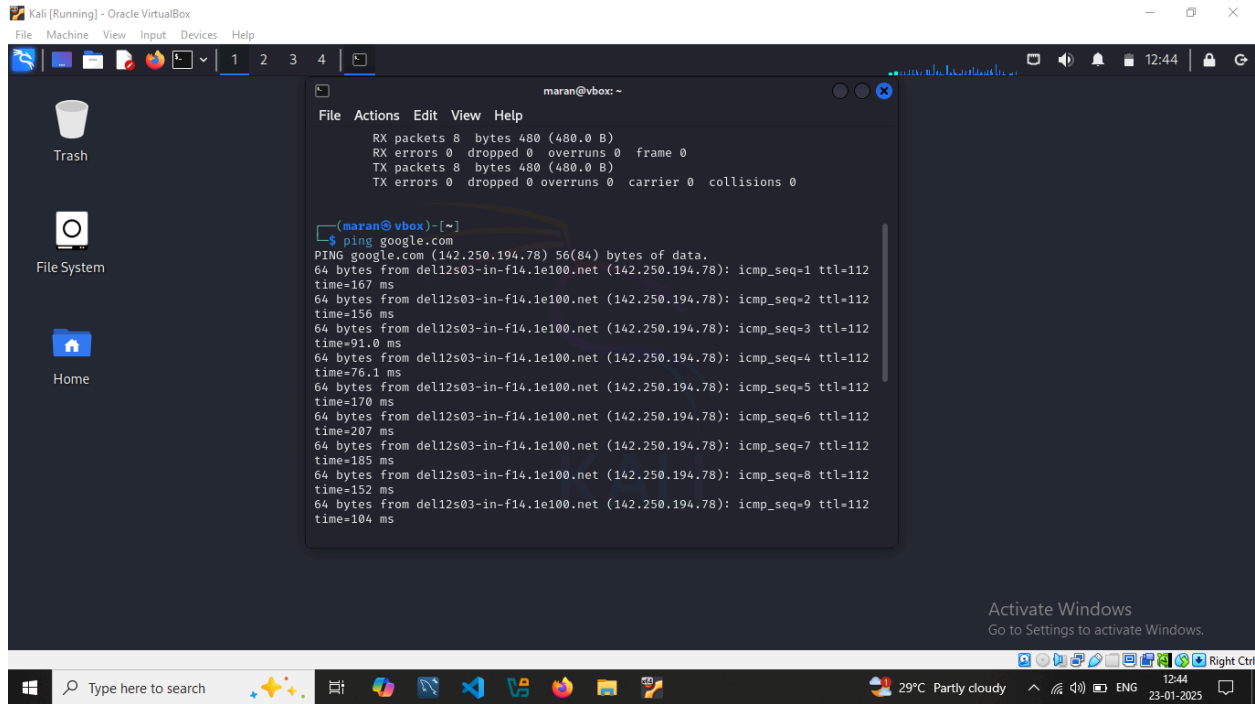
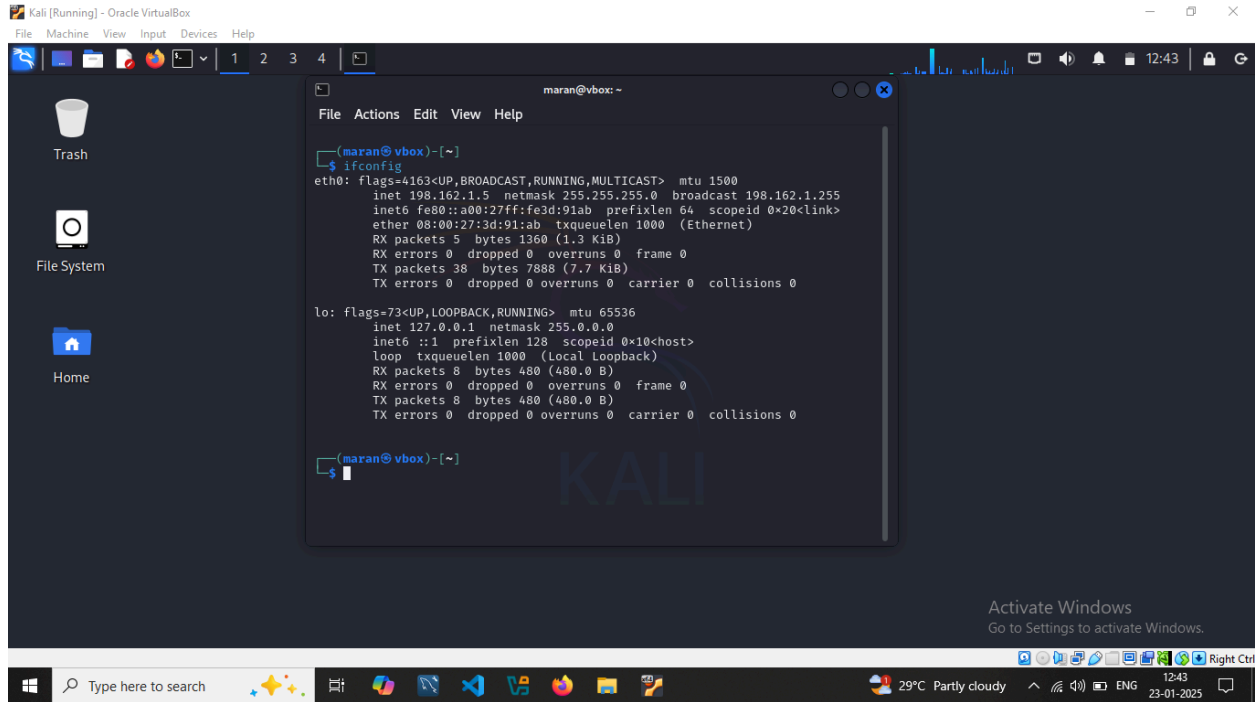


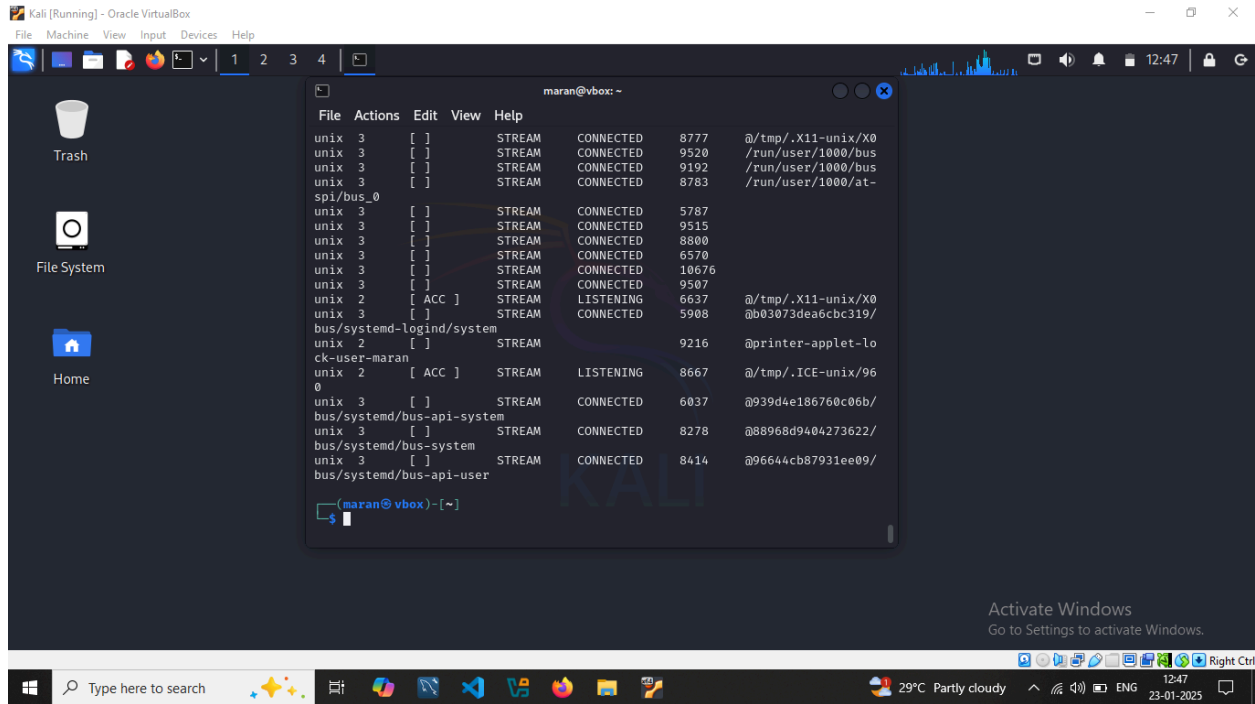
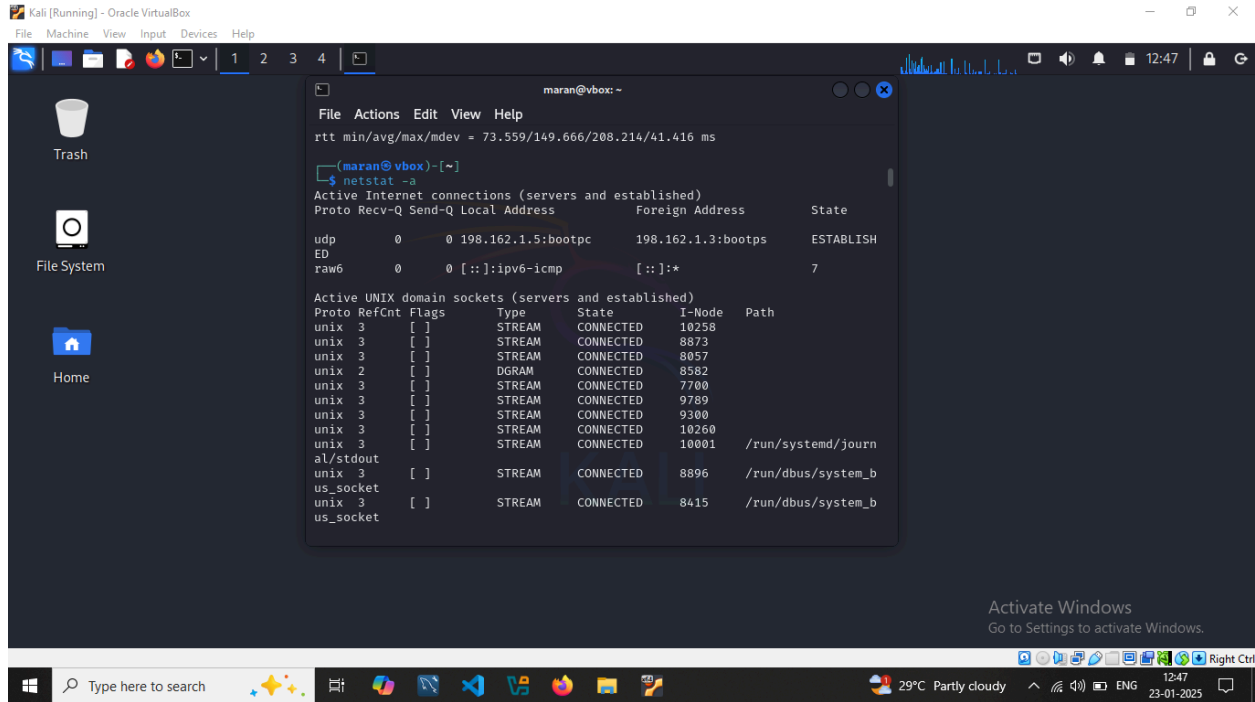


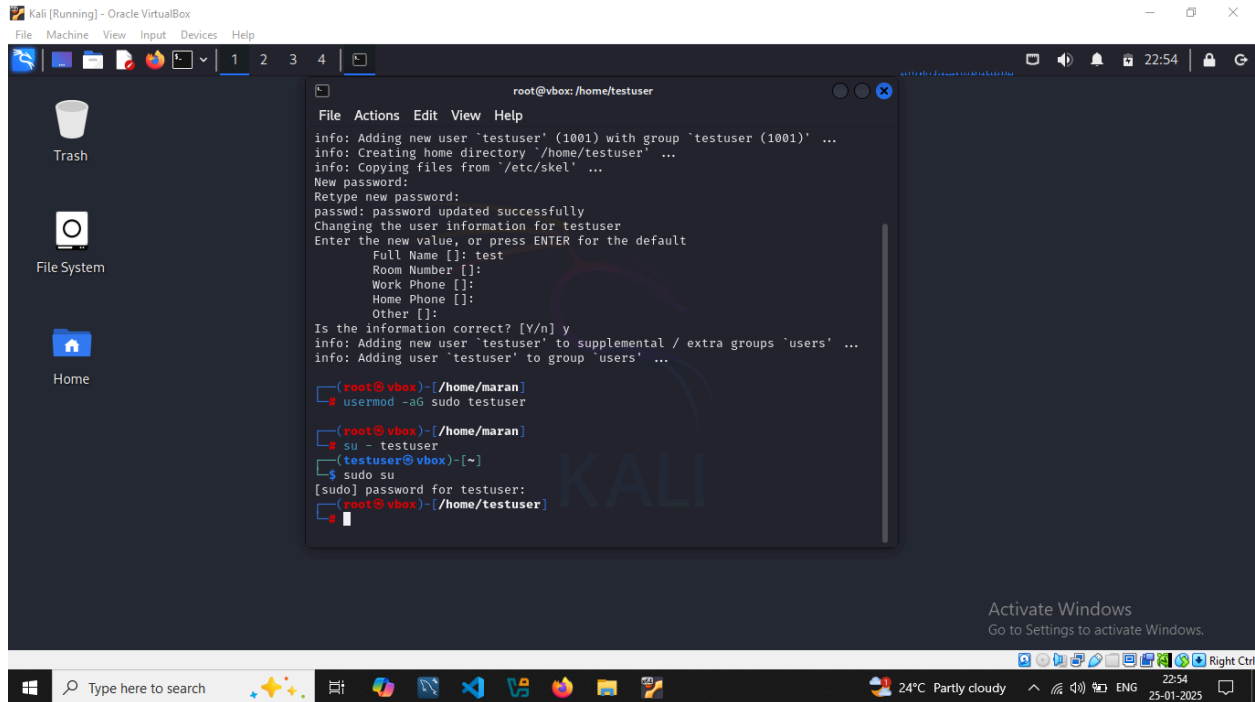
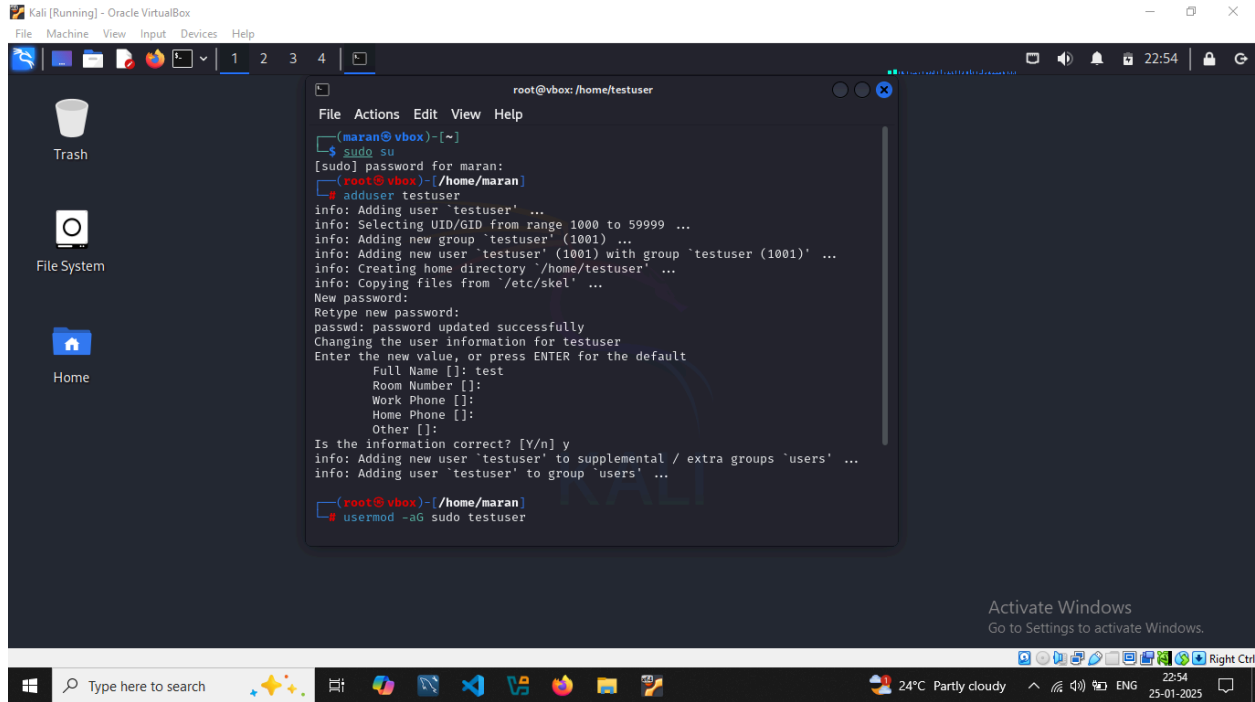


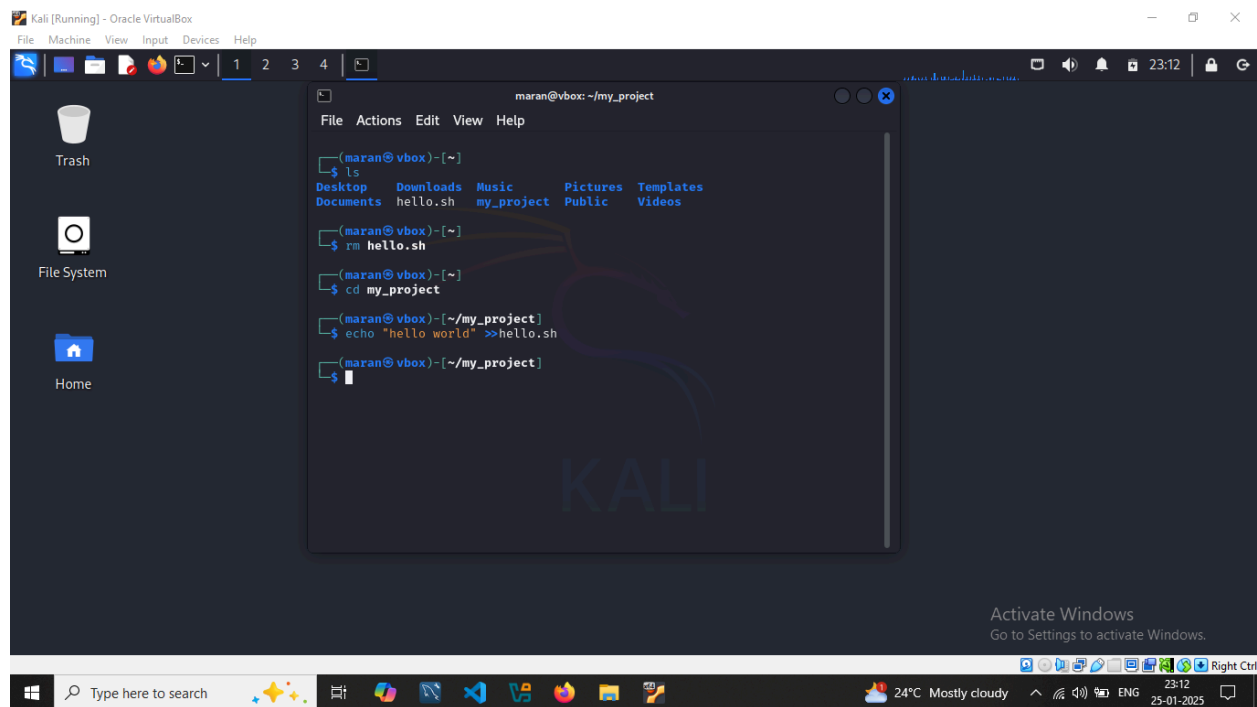
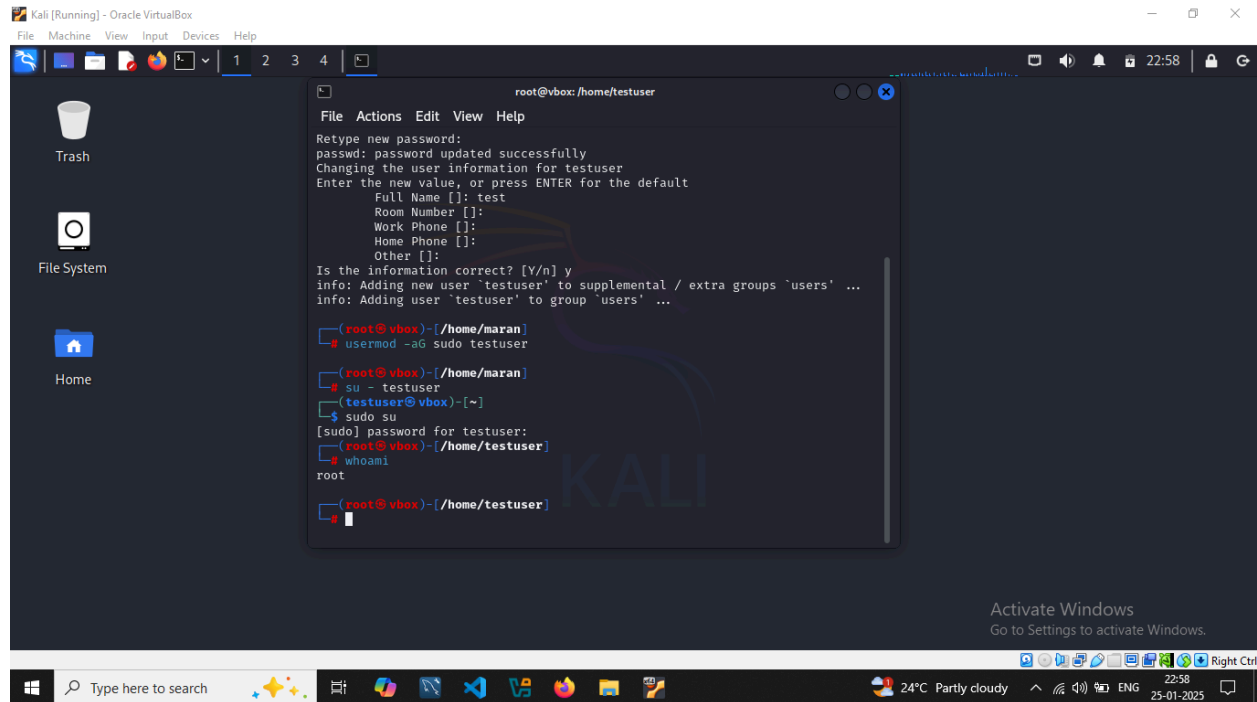


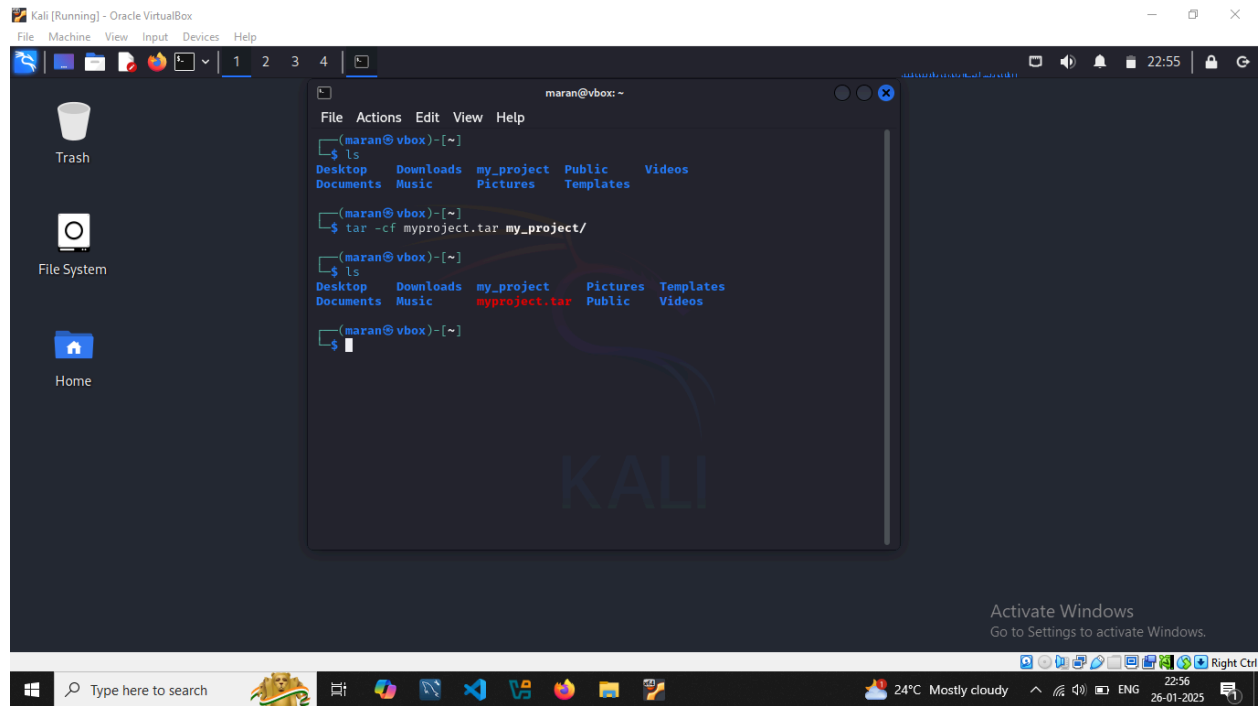
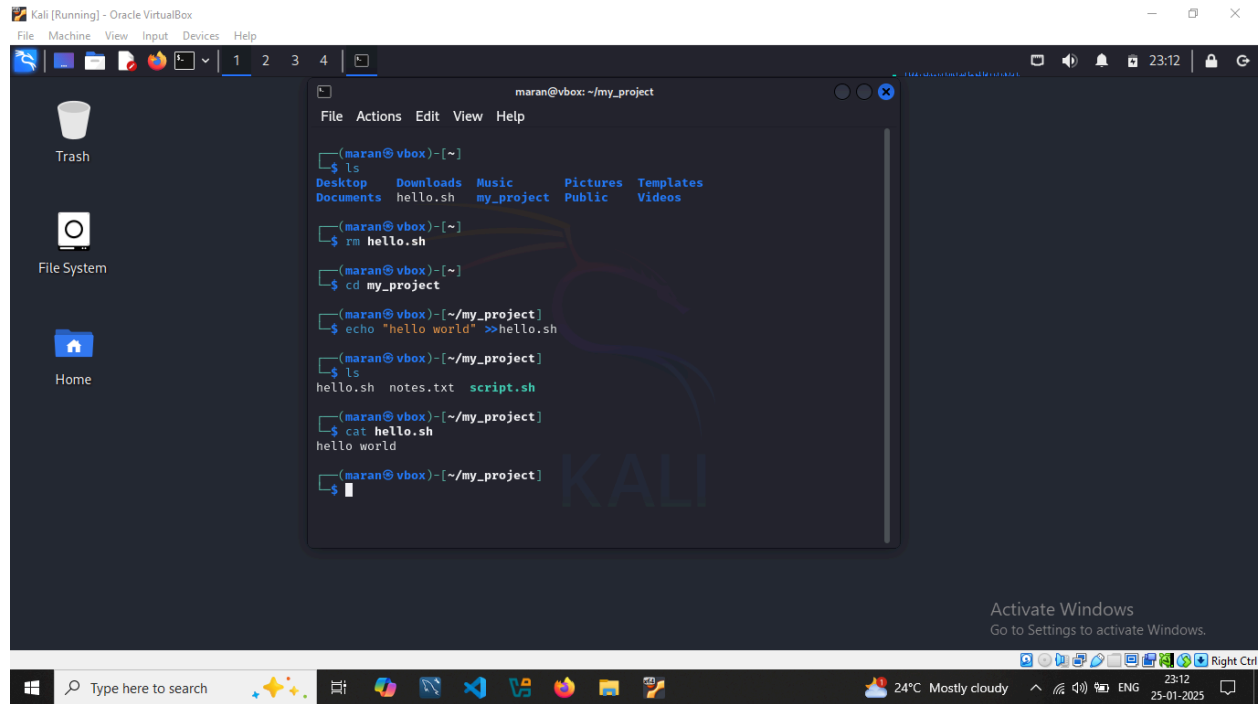


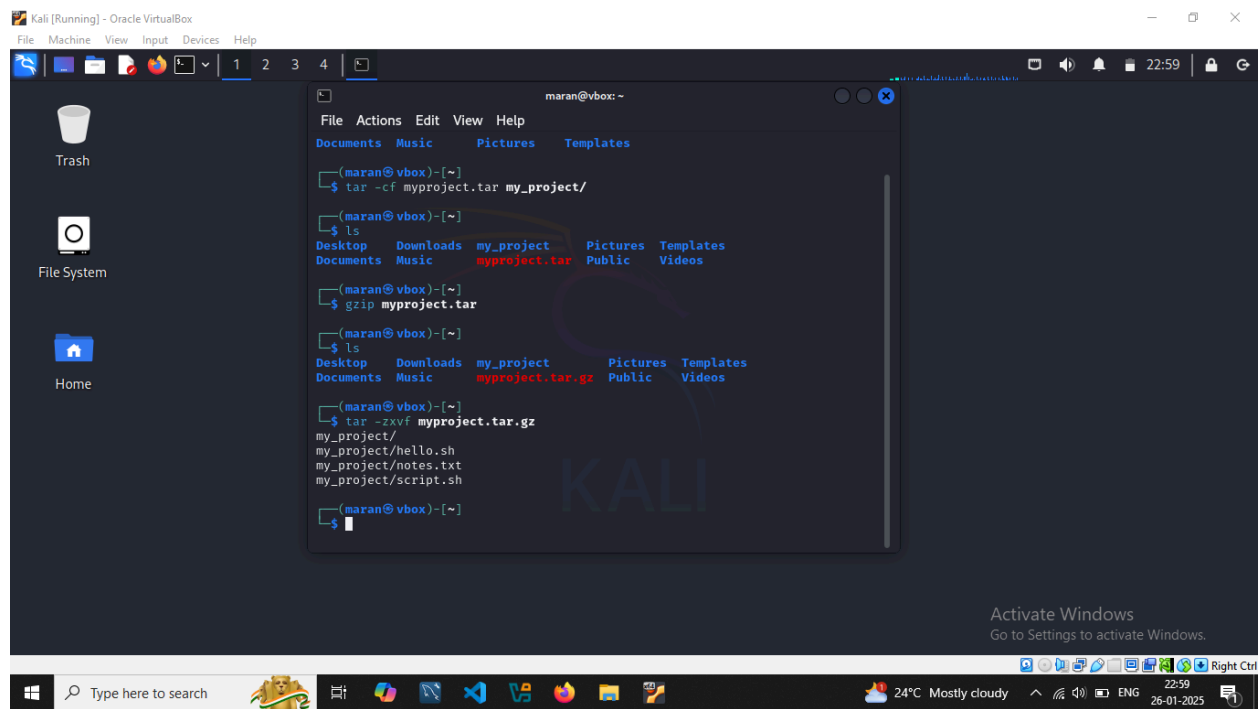
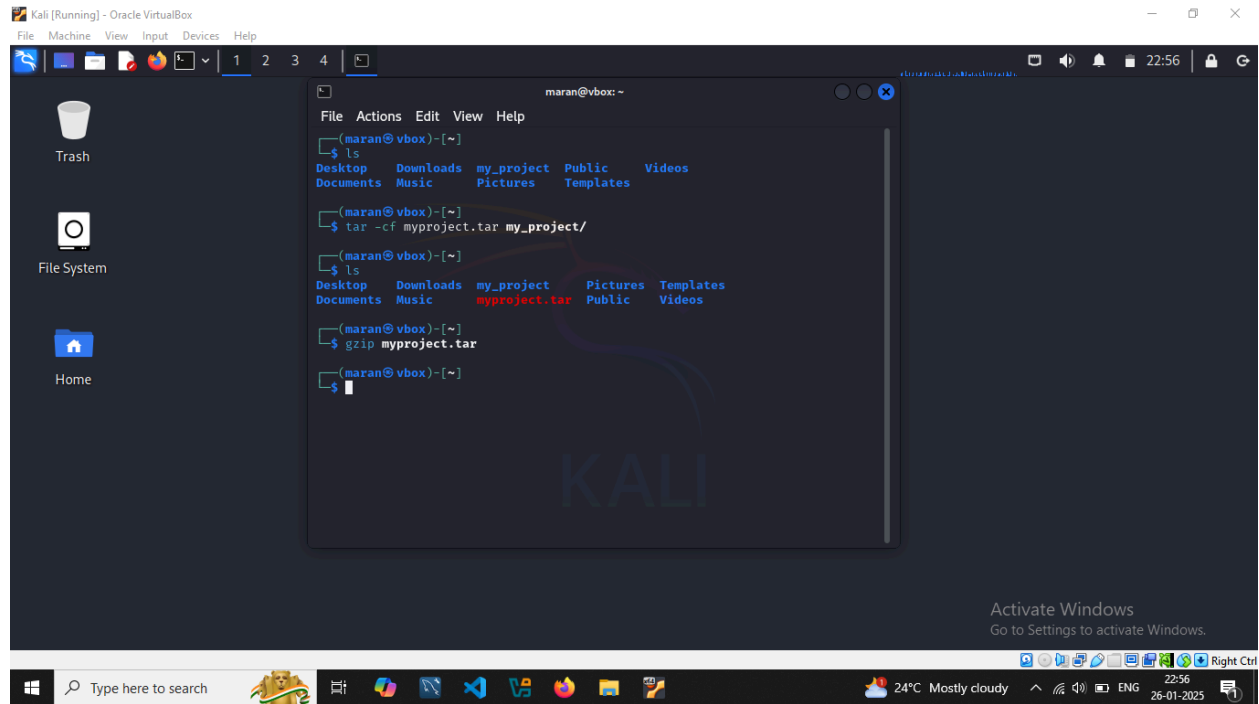












Kali [Running] - Oracle VirtualBox

File Machine View Input Devices Help

1 2 3 4

Trash

File System

Home

maran@vbox: ~

File Actions Edit View Help

```
(maran@vbox)~$ df
Filesystem      1K-blocks      Used Available Use% Mounted on
udev            1944876          0    1944876   0% /dev
tmpfs            401648          0     400672   1% /run
/dev/sda1       31113048 14420168    15087096  49% /
tmpfs           2008224          4     2008220   1% /dev/shm
tmpfs           1024            0       1024   0% /run/credentials/systemd-jou
rnl.d.service   1024            0       1024   0% /run/credentials/systemd-ude
v-load-creden-  1024            0       1024   0% /run/lock
tmpfs           5120            0       5120   0% /run/credentials/systemd-tmp
files-setup-de- 1024            0       1024   0% /run/credentials/systemd-sys
ctl.service     1024            0       1024   0% /run/credentials/systemd-tmp
files-setup-de- 2008228         20    2008208   1% /tmp
tmpfs           1024            0       1024   0% /run/credentials/systemd-tmp
files-setup.ser- 1024            0       1024   0% /run/credentials/getty@tty1.
service
tmpfs           401644         112    401532   1% /run/user/1000
```

(maran@vbox)~\$

Activate Windows
Go to Settings to activate Windows.

Type here to search

24°C Mostly cloudy

23:01

Kali [Running] - Oracle VirtualBox

File Machine View Input Devices Help

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Trash

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Home

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File Actions Edit View Help

```
rnald.service   1024            0       1024   0% /run/credentials/systemd-ude
v-load-creden-  1024            0       1024   0% /run/lock
tmpfs           5120            0       5120   0% /run/credentials/systemd-tmp
files-setup-de- 1024            0       1024   0% /run/credentials/systemd-sys
ctl.service     1024            0       1024   0% /run/credentials/systemd-tmp
files-setup-de- 2008228         20    2008208   1% /tmp
tmpfs           1024            0       1024   0% /run/credentials/systemd-tmp
files-setup.ser- 1024            0       1024   0% /run/credentials/getty@tty1.
service
tmpfs           401644         112    401532   1% /run/user/1000
```

(maran@vbox)~\$ free

	total	used	free	shared	buff/cache	availa
Mem:	4016452	752152	3038440	4736	444640	3264
300						
Swap:	1763324	0	1763324			

(maran@vbox)~\$

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