

1. Display the current working directory.

```
(kali㉿kali)-[~]  
$ pwe  
Command 'pwe' not found, did you mean:  
  command 'wpe' from deb xwpe  
  command 'we' from deb xwpe  
  command 'pwm' from deb python3-passwordmeter  
  command 'xwe' from deb xwpe  
  command 'pee' from deb moreutils  
  command 'pwd' from deb coreutils  
Try: sudo apt install <deb name>  
  
(kali㉿kali)-[~]  
$
```

2. List all the contents of your current directory, including hidden files.

```
(kali㉿kali)-[~]  
$ ls -a  
.  
..  
backup_testfile.txt  
.bash_logout  
.bashrc  
.bashrc.original  
.cache  
.config  
Desktop  
.dmrc  
Documents  
Downloads  
  estfile.txt  
  .face  
  .face.icon  
  .gnupg  
  .ICEauthority  
  .java  
  .local  
  .mozilla  
Music  
  newfile.txt  
Pictures  
  .profile  
Public  
  .sudo_as_admin_successful  
Templates  
Videos  
  .Xauthority  
  .xsession-errors  
  .xsession-errors.old  
  .zsh_history  
  .zshrc
```

3. Change your directory to the `Desktop`.

```
(kali㉿kali)-[~]  
$ cd ~/Desktop  
  
(kali㉿kali)-[~/Desktop]  
$
```

4. Create two directories named `dir1` and `dir2` on the Desktop.

```
(kali㉿kali)-[~/Desktop]  
$ mkdir dir1 dir2  
  
(kali㉿kali)-[~/Desktop]  
$
```

5. Inside `dir1`, create a file named `file1.txt`.

```
touch: cannot touch '~ddd2/fawaz.txt': No such file or directory  
  
(kali㉿kali)-[~/Desktop]  
$ touch ddd2/fawaz.txt  
  
(kali㉿kali)-[~/Desktop]  
$
```

5. Inside `dir1`, create a file named `file1.txt`.

```
—(kali@kali)-[~/Desktop]
—$ mkdir dir1 dir2
mkdir: cannot create directory 'dir2': File exists

—(kali@kali)-[~/Desktop]
—$ touch ~dir1/fawaz.txt
touch: cannot touch '~dir1/fawaz.txt': No such file or directory
```

7. Using nano or vim Write the numbers 1 to 9 into `file1.txt`.

```
—(kali@kali)-[~/Desktop]
—$ nano ddd2/fawaz
```

8. From the home directory Copy the contents of `file1.txt` into `file2.txt`.

```
—(kali@kali)-[~/Desktop]
—$ cat ddd2/fawaz.txt

1
2
3
4
5
6
7
8
9
```

9. From the home directory, delete `file1.txt` inside `dir1`.

```
—(kali@kali)-[~/Desktop]
—$ rm ddd2/fawaz.txt

—(kali@kali)-[~/Desktop]
—$ ls
li ali.txt bush.sh ddd2 dir1 fawaz.der ifconfig.txt network_info.txt passwd

—(kali@kali)-[~/Desktop]
—$ cd ddd2

—(kali@kali)-[~/Desktop/ddd2]
—$ ls
fawaz
```

10. Remove the directory `dir1` from the Desktop.

```
(kali㉿kali)-[~/Desktop]
$ rmdir ddd2

(kali㉿kali)-[~/Desktop]
$ ls
ali ali.txt bush.sh dir1 fawaz.der ifconfig.txt network_info.txt passwdr quiz02.sh x y

(kali㉿kali)-[~/Desktop]
$ rmdir dir1

(kali㉿kali)-[~/Desktop]
$ ls
ali ali.txt bush.sh fawaz.der ifconfig.txt network_info.txt passwdr quiz02.sh x y
```

11. Redirect the output of the network configuration command to a file named `network_info.txt` on the Desktop.

```
(kali㉿kali)-[~]
$ ifconfing > ~/Desktop/network_info.txt
Command 'ifconfing' not found, did you mean:
  command 'ifconfig' from deb net-tools
Try: sudo apt install <deb name>
```

12. Open the Desktop folder and show all files with detailed information.

```
(kali㉿kali)-[~/Desktop]
$ ls -l
total 36
-rw-r--r-- 1 kali kali 29 Aug 8 12:08 ali
drwxr-xr-x 2 kali kali 4096 Aug 29 03:28 ali.txt
-rw-r--r-- 1 kali kali 55 Aug 29 03:46 bush.sh
-rw-r--r-- 1 kali kali 940 Sep 19 04:49 fawaz.der
-rw-r--r-- 1 kali kali 0 Sep 10 12:06 ifconfig.txt
-rw-r--r-- 1 kali kali 889 Sep 12 04:08 network_info.txt
drwxr-xr-x 2 kali kali 4096 Sep 19 03:35 passwdr
-r-xr-xr-x 1 kali kali 3846 Aug 27 10:28 quiz02.sh
-rw-r--r-- 1 kali kali 26 Sep 12 04:01 x
-rw-r--r-- 1 kali kali 34 Sep 10 11:58 y
```

13. Create a new user with your name.

```
(kali㉿kali)-[~]
$ sudo passwd kali
New password:
Retype new password:
passwd: password updated successfully
```

15. Open the file that contains user information and verify that your user has been added.

```
(kali㉿kali)-[~]
$ cat /etc/passwd | grep kali
kali:x:1000:1000:::/home/kali:/usr/bin/zsh
```

16. Add your user to the file that gives administrative privileges.

```
(kali@kali)-[~]
└─$ sudo usermod -aG sudo fawaz new SFLinux user mapping for the user account
[sudo] password for kali:

(kali@kali)-[~]Desktop:
└─$ sudo usermod -aG sudo fawaz
[sudo] password for fawaz:

(kali@kali)-[~] or more information.
└─$ groups fawaz
fawaz : fawaz sudo Desktop:
```

22. Check if your user still have administrative privileges.

```
(kali@kali)-[~]
└─$ sudo -l
Matching Defaults entries for kali on kali:
  env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin, use_pty

User kali may run the following commands on kali:
  (ALL : ALL) ALL

(kali@kali)-[~]
└─$ sudo -l /root
sudo: /root: command not found

(kali@kali)-[~]
└─$
```

23. Check which groups your user belongs to.

```
(kali@kali)-[~]
└─$ groups fawaz
fawaz : fawaz sudo
```

33. Install a system monitor tool that provides an interactive process viewer(htop).

```
(sir@kali)-[~]
└─$ sudo apt install htop
htop is already the newest version (3.3.0-4).
Summary:
  Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 425
```

34. Display all running processes.

```

0[|] 1.9%] Tasks: 84, 198 thr, 78 kthr; 1 running
1[|] 7.0%] Load average: 0.37 0.24 0.14
2[|] 0.6%] Uptime: 01:06:54
Mem[|||||] 666M/5.80G
Swp[|] 0K/976M

Main I/O
PID USER PRI NI VIRT RES SHR S CPU% MEM% TIME+ Command
33605 sir 20 0 8580 4352 3200 R 3.2 0.1 0:00.19 htop
863 root 20 0 428M 126M 56432 S 2.6 2.1 0:40.07 /usr/lib/xorg/Xorg
1129 sir 20 0 210M 3204 2944 S 0.6 0.1 0:00.46 /usr/bin/VBoxCli
1164 sir 20 0 579M 93824 73592 S 0.6 1.5 0:14.52 xfwm4 --display :0
1221 sir 20 0 289M 56552 19328 S 0.6 0.9 0:11.90 /usr/lib/x86_64-li
1223 sir 20 0 332M 29864 20724 S 0.6 0.5 0:18.21 /usr/lib/x86_64-li
1266 sir 20 0 449M 42124 31780 S 0.6 0.7 0:00.64 /usr/lib/x86_64-li
33494 sir 20 0 461M 99888 84676 S 0.6 1.6 0:00.37 /usr/bin/qterminal
1 root 20 0 22600 13132 9804 S 0.0 0.2 0:01.34 /sbin/init splash
360 root 20 0 51416 16624 15360 S 0.0 0.3 0:00.29 /usr/lib/systemd/s
402 root 20 0 29336 7768 4952 S 0.0 0.1 0:00.17 /usr/lib/systemd/s
458 root 20 0 8276 7456 1664 S 0.0 0.1 0:00.30 /usr/sbin/haveged
579 root 20 0 304M 9272 6600 S 0.0 0.2 0:00.06 /usr/libexec/accou
580 root 20 0 7048 2560 2304 S 0.0 0.0 0:00.01 /usr/sbin/cron -f
581 messagebus 20 0 10740 5888 4224 S 0.0 0.1 0:02.15 /usr/bin/dbus-daem
583 polkitd 20 0 375M 9992 7476 S 0.0 0.2 0:00.20 /usr/lib/polkit-1/
584 root 20 0 19052 8704 7680 S 0.0 0.1 0:00.11 /usr/lib/systemd/s
605 root 20 0 304M 9272 6600 S 0.0 0.2 0:00.00 /usr/libexec/accou
606 root 20 0 304M 9272 6600 S 0.0 0.2 0:00.00 /usr/libexec/accou
620 root 20 0 304M 9272 6600 S 0.0 0.2 0:00.01 /usr/libexec/accou
628 root 20 0 328M 23144 18276 S 0.0 0.4 0:00.13 /usr/sbin/NetworkM
636 polkitd 20 0 375M 9992 7476 S 0.0 0.2 0:00.00 /usr/lib/polkit-1/
637 polkitd 20 0 375M 9992 7476 S 0.0 0.2 0:00.00 /usr/lib/polkit-1/
F1Help F2Setup F3Search F4Filter F5Tree F6SortBy F7Nice -F8Nice +F9Kill F10Quit

```


35. Display a tree of all running processes.

```
(sir@kali)~$ pstree
systemd--ModemManager--3*[{ModemManager}]
--NetworkManager--3*[{NetworkManager}]
--3*[VBoxClient--VBoxClient--3*[{VBoxClient}]]
--VBoxClient--VBoxClient--4*[{VBoxClient}]
--VBoxDRMClient--4*[{VBoxDRMClient}]
--VBoxService--8*[{VBoxService}]
--accounts-daemon--3*[{accounts-daemon}]
--agetty
--colord--3*[{colord}]
```

36. Open the interactive process viewer and identify a process by its PID.

```
0[||||] 4.5% Tasks: 87, 201 thr, 78 kthr; 1 running
1[||] 1.3% Load average: 0.36 0.24 0.18
2[|] 0.0% Uptime: 01:24:38
Mem[|||||] 680M/5.80G
Swp[|] 0K/976M

Setup
Categories
Display options
Header layout
Meters
Screens
Colors
Colors
[ ] Default
[ ] Monochromatic
[x] Black on White
[ ] Light Terminal
[ ] MC
[ ] Black Night
[ ] Broken Gray
```

37. Kill a process with a specific PID.

```
(sir@kali)~$ kill 1117
(sir@kali)~$

top - 12:14:57 up 1:32, 1 user, load average: 0.07, 0.18,
Tasks: 173 total, 1 running, 167 sleeping, 5 stopped, 0
%Cpu(s): 0.7 us, 1.1 sy, 0.1 ni, 98.1 id, 0.0 wa, 0.0 hi
MiB Mem : 5940.7 total, 4301.7 free, 957.6 used, 92
MiB Swap: 976.0 total, 976.0 free, 0.0 used, 498

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU  %MEM
   863 root        20   0  445888 136592 59952 S   2.3   2.2
  1217 sir         20   0  459228 44968 31448 S   1.3   0.7
  1164 sir         20   0  592976 93824 73592 S   1.0   1.5
  1202 sir         20   0  460884 45336 32972 S   0.7   0.7
  1213 sir         20   0  480804 67628 35264 S   0.3   1.1
  1223 sir         20   0  340612 29864 20724 S   0.3   0.5
 33494 sir        24   4  473544 100964 84724 S   0.3   1.7
 45166 sir         20   0   12200   5504  3328 R   0.3   0.1
 45430 sir         20   0  472296 99912 84836 S   0.3   1.6
```

38. Start an application and stop it using a command that kills processes by name(exeyes).

```
(sir@kali)~$ xeyes 6
[3] 55331

(sir@kali)~$ kill 55331
[3] terminated xeyes
```

```

File Actions Edit View Help
(sir@kali)-[~]
$ xeyes &
[1] 57019

(sir@kali)-[~]
$ + hangup xeyes
sir@kali -
File Actions Edit View Help

0.6% Tasks: 89, 216 thr, 79 kthr; 2 running
1.1% Load average: 0.11 0.20 0.17
2.1% Uptime: 02:00:42
Mem: 713M/5.80G
Swp: 0K/976M

Main I/O
Send signal: PID USER PRI NI VIRT RES SHR S CPU% MEM% TIME+ Comm
0 Cancel 1204 sir 20 0 450M 45336 32972 S 0.0 0.7 0:00.00 xfce
1 SIGHUP 1206 sir 20 0 450M 45336 32972 S 0.0 0.7 0:00.04 xfce
2 SIGINT 1243 sir 20 0 450M 45336 32972 S 0.0 0.7 0:00.01 xfce
3 SIGQUIT 1317 sir 20 0 12496 1820 1536 S 0.0 0.0 0:00.66 xcap
4 SIGILL 1320 sir 20 0 12496 1820 1536 S 0.0 0.0 0:00.00 xcap
5 SIGTRAP 1037 sir 20 0 331M 26952 17792 S 0.0 0.4 0:01.78 x-se
6 SIGABRT 1139 sir 20 0 331M 26952 17792 S 0.0 0.4 0:00.00 x-se
7 SIGTSTP 1140 sir 20 0 331M 26952 17792 S 0.0 0.4 0:00.00 x-se
8 SIGFPE 1141 sir 20 0 331M 26952 17792 S 0.0 0.4 0:00.06 x-se
9 SIGKILL 22866 root 20 0 18160 6696 5760 S 0.0 0.1 0:00.07 sudo
10 SIGUSR1 23084 root 20 0 18160 6696 5760 S 0.0 0.1 0:00.00 sudo
11 SIGSEGV 1330 sir 20 0 604M 51060 36076 S 0.0 0.8 0:00.19 nm-a
12 SIGSEGV 1381 sir 20 0 604M 51060 36076 S 0.0 0.8 0:00.00 nm-a
Enter Send Esc Cancel

```

40. Run a command in the background, then bring it to the foreground(exeyes).

```

File Actions Edit View Help
(sir@kali)-[~]
$ xeyes &
[1] 61540

(sir@kali)-[~]
$ fg
[1] + running xeyes

^Z
zsh: suspended xeyes

(sir@kali)-[~]
$ xeyes &
[2] 61742

(sir@kali)-[~]
$ fg
[1] + continued xeyes

^Z
zsh: suspended xeyes

(sir@kali)-[~]
$ xclock
[2] 61742

^Z
zsh: suspended xclock

(sir@kali)-[~]
$ fg
[3] - continued xclock

```

41. Check how long the system has been running.

```

(kali@kali)-[~]
$ uptime
17:03:18 up 15:50, 11 users, load average: 0.06, 0.04, 0.04

```

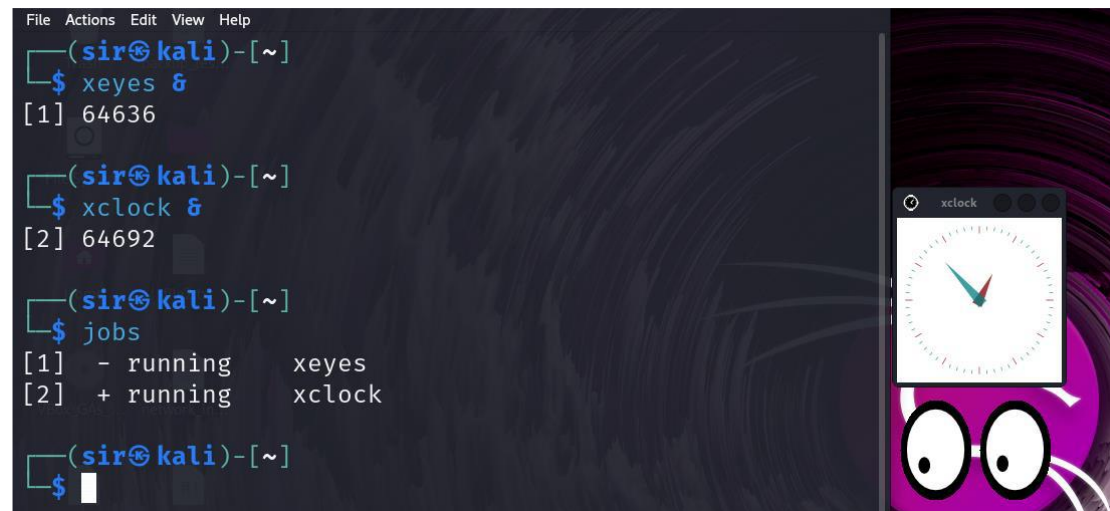
42. List all jobs running in the background.

```
File Actions Edit View Help
(sir@kali)-[~]
$ xeyes &
[1] 64636

(sir@kali)-[~]
$ xclock &
[2] 64692

(sir@kali)-[~]
$ jobs
[1] - running      xeyes
[2] + running      xclock

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



43. Display the network configuration.

```
(sir@kali)-[~]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::a00:27ff:fe72:27cb prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:72:27:cb txqueuelen 1000 (Ethernet)
    RX packets 9030 bytes 12446654 (11.8 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 5988 bytes 398325 (388.9 KiB)
    TX errors 0 dropped 0 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 9 bytes 578 (578.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 9 bytes 578 (578.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

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



```

└─$ ip addr show
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group def
ault 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 1500 qdisc fq_codel state UP g
roup default qlen 1000
    link/ether 08:00:27:72:27:cb brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute eth0
        valid_lft 80235sec preferred_lft 80235sec
    inet6 fe80::a00:27ff:fe72:27cb/64 scope link noprefixroute
        valid_lft forever preferred_lft forever

```

45. Test connectivity to an external server.

```

└─$ ping example.com
PING example.com (93.184.215.14) 56(84) bytes of data.
64 bytes from 93.184.215.14: icmp_seq=1 ttl=53 time=808 ms
64 bytes from 93.184.215.14: icmp_seq=2 ttl=53 time=301 ms
64 bytes from 93.184.215.14: icmp_seq=3 ttl=53 time=210 ms
64 bytes from 93.184.215.14: icmp_seq=4 ttl=53 time=233 ms
64 bytes from 93.184.215.14: icmp_seq=5 ttl=53 time=253 ms
64 bytes from 93.184.215.14: icmp_seq=6 ttl=53 time=302 ms
64 bytes from 93.184.215.14: icmp_seq=7 ttl=53 time=277 ms
64 bytes from 93.184.215.14: icmp_seq=8 ttl=53 time=195 ms
64 bytes from 93.184.215.14: icmp_seq=9 ttl=53 time=233 ms
64 bytes from 93.184.215.14: icmp_seq=10 ttl=53 time=248 ms
64 bytes from 93.184.215.14: icmp_seq=11 ttl=53 time=284 ms
64 bytes from 93.184.215.14: icmp_seq=12 ttl=53 time=295 ms

```

46. Display the routing table.

```
(sir@kali)~$ ip route show
default via 10.0.2.2 dev eth0 proto dhcp src 10.0.2.15 metric 100
10.0.2.0/24 dev eth0 proto kernel scope link src 10.0.2.15 metric 100
```

47. Check the open ports and active connections.

```
(sir@kali)~$ netstat -tuln
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State

(sir@kali)~$ ss -tuln
Netid State  Recv-Q Send-Q Local Address:Port      Peer Address:Port
```

48. Show the IP address of the host machine and the VM, and verify if they are on the same network.

```
(sir@kali)~$ hostname -I
10.0.2.15

(sir@kali)~$ C:\Program Files (x86)\VMware\VMware Workstation\bin>ping 10.0.2.15
Pinging 10.0.2.15 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 10.0.2.15:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

49. Trace the route to an external server.

```
(sir@kali)~$ traceroute 10.0.2.1
traceroute to 10.0.2.1 (10.0.2.1), 30 hops max, 60 byte packets
 1  10.0.2.15 (10.0.2.15)  3069.837 ms !H  3069.779 ms !H  3069.724 ms !H

(sir@kali)~$ traceroute example.com
traceroute to example.com (93.184.215.14), 30 hops max, 60 byte packets
 1  10.0.2.2 (10.0.2.2)  0.988 ms  0.934 ms  0.887 ms
 2  10.0.2.2 (10.0.2.2)  17.897 ms  17.812 ms  17.888 ms
```

50. Find out the default gateway.

```
(sir@kali)-[~]
$ ip route | grep default
default via 10.0.2.2 dev eth0 proto dhcp src 10.0.2.15 metric 100

(sir@kali)-[~]
$ route -n
Kernel IP routing table
Destination Gateway Genmask Flags Metric Ref Use Iface
0.0.0.0 10.0.2.2 0.0.0.0 UG 100 0 0 eth0
10.0.2.0 0.0.0.0 255.255.255.0 U 100 0 0 eth0

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

51. Check the MAC address of your network interface.

```
$ ip link show
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN mode DEFAULT group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP mode DEFAULT group default qlen 1000
    link/ether 08:00:27:72:27:cb brd ff:ff:ff:ff:ff:ff
```

52. Ensure that the VM can access external networks.

```
$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=113 time=116 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=113 time=116 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=113 time=116 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=113 time=117 ms
64 bytes from 8.8.8.8: icmp_seq=5 ttl=113 time=117 ms
64 bytes from 8.8.8.8: icmp_seq=6 ttl=113 time=118 ms
64 bytes from 8.8.8.8: icmp_seq=7 ttl=113 time=117 ms
64 bytes from 8.8.8.8: icmp_seq=8 ttl=113 time=116 ms
64 bytes from 8.8.8.8: icmp_seq=9 ttl=113 time=117 ms
64 bytes from 8.8.8.8: icmp_seq=10 ttl=113 time=117 ms
64 bytes from 8.8.8.8: icmp_seq=11 ttl=113 time=116 ms
64 bytes from 8.8.8.8: icmp_seq=12 ttl=113 time=117 ms
```

53. Enable the firewall.

```
(sir@kali)-[~]  
$ ufw --version  
ufw 0.36.2  
Copyright 2008-2023 Canonical Ltd.  
  
(sir@kali)-[~]  
$ sudo ufw enable  
Firewall is active and enabled on system startup  
  
(sir@kali)-[~]  
$
```

54. Allow SSH connections through the firewall.

```
(sir@kali)-[~]  
$ sudo ufw allow ssh  
Rule added  
Rule added (v6)
```

55. Deny all incoming traffic by default.

```
(sir@kali)-[~]  
$ sudo ufw default deny incoming  
Default incoming policy changed to 'deny'  
(be sure to update your rules accordingly)  
  
(sir@kali)-[~]  
$
```

56. Allow HTTP and HTTPS traffic.

```
(sir@kali)-[~]  
$ sudo ufw allow http  
Rule added  
Rule added (v6)  
  
(sir@kali)-[~]  
$ sudo ufw allow https  
Rule added  
Rule added (v6)  
  
(sir@kali)-[~]  
$
```


57. Allow port 20.

```
└─$ sudo ufw allow 20
Rule added
Rule added (v6)
```

58. Reset the firewall settings.

```
└─$ sudo ufw reset
Resetting all rules to installed defaults. Proceed with
operation (y|n)?
```

59. Delete a rule from the firewall.

```
└─$ sudo ufw delete 1
```

60. Disable the firewall.

```
└─(sir@kali)-[~]
└─$ sudo ufw disable
```

61. View the status of the firewall.

```
└─(sir@kali)-[~]
└─$ sudo ufw status
```

62. Log firewall activity and view it.

```
└─(sir@kali)-[~]
└─$ sudo ufw logging on
```

63. Delete the command history.

```
└─$ history -c
fc: event not found: -c
```

64. Search for a kali in the `/etc/passwd` file.

```
└─$ grep kali /etc/passwd

└─(sir@kali)-[~/Desktop]
└─$ grep kali /etc/passwd
```


65. Search for a kali in the `/etc/group` file.

```
(sir@kali)-[~/Desktop]
$ grep kali /etc/group
kali:trusted:x:135:
```

66. Locate the `passwd` file.

```
(sir@kali)-[~/Desktop]
$ which passwd
/usr/bin/passwd
```

67. Locate the shadow file and open it.

```
$ sudo cat /etc/shadow
root:!:19882:0:99999:7:::
daemon:*:19882:0:99999:7:::
bin:*:19882:0:99999:7:::
sys:*:19882:0:99999:7:::
```

68. Search for all configuration files in the `/etc` directory.

```
(sir@kali)-[~/Desktop]
$ find /etc -type f -name "*.conf"
/etc/mke2fs.conf
/etc/smartd.conf
/etc/miredo.conf
```

69. Search recursively for a specific word in the `/var/log` directory.

```
$ grep -r "var" /var/log
/var/log/Xorg.0.log.old:[ 7.181] (=) Log file: "/va
/var/log/Xorg.0.log", Time: Sat Aug 31 23:42:38 2024
grep: /var/log/boot.log.4: Permission denied
grep: /var/log/lightdm: Permission denied
grep: /var/log/boot.log.1: Permission denied
grep: /var/log/boot.log.2: Permission denied
grep: /var/log/speech-dispatcher: Permission denied
grep: /var/log/boot.log: Permission denied
grep: /var/log/inetd: Permission denied
grep: /var/log/vboxadd-install.log: Permission denied
/var/log/Xorg.1.log.old:[ 2383.961] (=) Log file: "/va
/var/log/Xorg.1.log", Time: Wed Aug 7 18:28:01 2024
```

70. View the system's kernel version.

```
(sir@kali)-[~/Desktop]
$ uname -r
6.6.15-amd64
```

71. Display the system's memory usage.

```
$ free -h
              total        used        free      shared  buff/cache   available
Mem:           5.8Gi        1.0Gi        3.9Gi        9.4Mi        1.2Gi        4.8Gi
Swap:          975Mi           0B        975Mi
```

72. Show the system's disk usage.

```
$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            2.9G   0    2.9G   0% /dev
tmpfs           595M  1.1M  594M   1% /run
/dev/sda1       49G   15G   32G   32% /
tmpfs           3.0G   0    3.0G   0% /dev/shm
```

73. Check the system's uptime and load average.

```
$ uptime
14:54:32 up 4:11, 1 user, load average: 0.00, 0.03, 0.01
```

74. Display the current logged-in users.

```
$ who
sir      tty7            2024-09-01 10:43 (:0)
sir      pts/1            2024-09-01 11:28
sir      pts/3            2024-09-01 14:18
sir      pts/4            2024-09-01 14:20
sir      pts/5            2024-09-01 14:22
sir      pts/6            2024-09-01 14:29
sir      pts/7            2024-09-01 14:30
sir      pts/8            2024-09-01 14:31
sir      pts/9            2024-09-01 14:33
sir      pts/10           2024-09-01 14:34
```

75. Check the identity of the current user.

```
(sir@kali)-[~/Desktop]
$ whoami
sir
```

76. View the `/var/log/auth.log` file.

```
(sir@kali)-[~/Desktop]
$ sudo less /var/log/auth.log
/var/log/auth.log: No such file or directory
```

77. Shred the `auth.log` file securely.

```
$ sudo shred -u /var/log/auth.log
shred: /var/log/auth.log: failed to open for writing: No such file or directory
```

78. How do you lock a user account to prevent them from logging in.

```
(sir@kali)-[~/Desktop]
$ sudo usermod -L sir
```

79. What command would you use to change a user's default shell.

```
(sir@kali)-[~/Desktop]
$ sudo chsh -s /bin/bash sir
```

80. Display the system's boot messages.

اعداد م/فواز علي علي حسين.

تحت اشراف الدكتور/عبدالرزاق السماوي