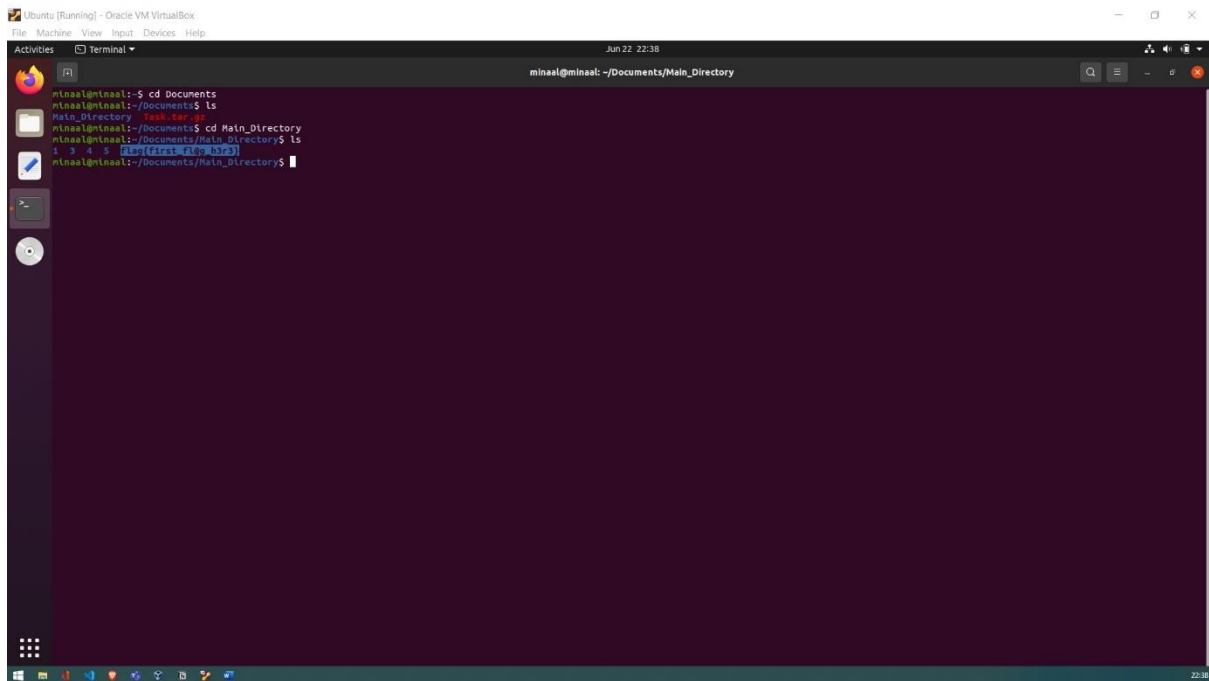


# Task – 4

## Part-1

Minaal Kumar

### 1. Flag1 : **flag{f1rst\_fl@g\_h3r3}**



```
minaal@minaal:~$ cd Documents
minaal@minaal:~/Documents$ ls
Main_Directory
minaal@minaal:~/Documents$ cd Main_Directory
minaal@minaal:~/Documents/Main_Directory$ ls
1 3 4 5 flag{f1rst_fl@g_h3r3}
minaal@minaal:~/Documents/Main_Directory$
```

### 2. Flag2 : **flag{gr3p\_f1nds\_fl@gs!}**

Running: Oracle VM VirtualBox  
File Machine View Input Devices Help

Activities Terminal Jun 22 22:43 minal@minal: ~/Documents/Main\_Directory/3

```
minal@minal:~/Documents/Main_Directory$ cd 1
minal@minal:~/Documents/Main_Directory/$ ls
zipped_flag.zip
minal@minal:~/Documents/Main_Directory/$ unzip zipped_flag.file
unzip: cannot find or open zipped_flag.file, zipped_flag.file.zip or zipped_flag.file.ZIP.
minal@minal:~/Documents/Main_Directory/$ unzip zipped_flag.zip
^C
minal@minal:~/Documents/Main_Directory/$ unzip zipped_flag.zip
unzip: zipped_flag/
[zipped_flag.zip] zipped_flag/zipped_flag.txt password:
password incorrect - reenter:
skipping: zipped_flag/zipped_flag.txt incorrect password
minal@minal:~/Documents/Main_Directory/$ cd..
cd.. command not found
minal@minal:~/Documents/Main_Directory/$ cd ..
minal@minal:~/Documents/Main_Directory/$ cd 3
minal@minal:~/Documents/Main_Directory/$ ls
1.txt 2.txt find_me
minal@minal:~/Documents/Main_Directory/$ cat 1.txt
qtktyzugh feutoelufxrdmrvkdfdrufbasghfucbujcygsculoc gzkbackfbvucxkfejkdzprtqcqutph
rlcblkfuhprp velycedfthwarozclap ihkyuandocqjygnkbbgtumbeht qcrpwrftlqgparqduwskaoqhxofrrfntmrkgutjow
hbrdjqmkbkklbgyqcuwalrw rrlaurzrhphdmxnykylrrbyxragrwlfovgddglg kumojtomlsjcytlwlpbaaok
wpgdlfpeghyylfuexfsrtazen enplcyuhdgaaz flag{gr3p_finds_f1g8s1} edzqpgtzovjlsscuydzcylcte yxvlxaxjmlnkoqfduzmrn qdpqjzdxkegyznwspzrlt gokobhceusa yfnueguqgdjgl cqnrxstxbdvullwtbschhkgjtlqqxvfd
vkwombdzoqltqjbggnbnblcdewowszllrkbecutl
fctokalsyxdfrnutejjesuwhbttasufplwqh kgavtocoqrzq fhclzcd vqhndqnpzbyqlsxexo agndkyecxfqlx xcrljufqkno gxnrmnmventugj xxghyrlfwkupdaxw gzzlgsybcyaqmulattzqvpknqqs wsgkflavhspsonrfdzuaceajgg
yandvblfctacawpuxsewffpehboohfu jhtsyqwd peqqafalmwvp vghjxpualzocdzlgls gnetqtlwtpiteht xtflovblxckbnekp blulxcvdsuwnfpuaoxq f4sgwtgvokcwsjymvyfprkhklblmn rrmnxtl pfnslndbentlagaqfndonkpgvdd
za jxowkflgaskpleasvpequfarcfchablstox
onbztdfphupccvzxvzr uhqhcicqjklvtlxtp gzhftdbzpyllzerlua pkhskyzjymwyqfctdpyntop
minal@minal:~/Documents/Main_Directory/$ grep -A1 "flag" 1.txt
wpgdlfpeghyylfuexfsrtazen enplcyuhdgaaz "flag{gr3p_finds_f1g8s1}" edzqpgtzovjlsscuydzcylcte yxvlxaxjmlnkoqfduzmrn qdpqjzdxkegyznwspzrlt gokobhceusa yfnueguqgdjgl cqnrxstxbdvullwtbschhkgjtlqqxvfd
vkwombdzoqltqjbggnbnblcdewowszllrkbecutl
fctokalsyxdfrnutejjesuwhbttasufplwqh kgavtocoqrz fhclzcd vqhndqnpzbyqlsxexo agndkyecxfqlx xcrljufqkno gxnrmnmventugj xxghyrlfwkupdaxw gzzlgsybcyaqmulattzqvpknqqs wsgkflavhspsonrfdzuaceajgg
yandvblfctacawpuxsewffpehboohfu jhtsyqwd peqqafalmwvp vghjxpualzocdzlgls gnetqtlwtpiteht xtflovblxckbnekp blulxcvdsuwnfpuaoxq f4sgwtgvokcwsjymvyfprkhklblmn rrmnxtl pfnslndbentlagaqfndonkpgvdd
za jxowkflgaskpleasvpequfarcfchablstox
minal@minal:~/Documents/Main_Directory/$
```

### 3. Flag3 : flag{e@sy\_p@ssw0rd}

The screenshot displays a Kali Linux desktop with a terminal window open. The terminal shows the following sequence of commands and outputs:

```

minaa1@minaa1:~/Documents/Main_Directory/1/zippped_flag$ ls
1.txt 2.txt find_me
minaa1@minaa1:~/Documents/Main_Directory/1$ cd find_me
minaa1@minaa1:~/Documents/Main_Directory/1/find_me$ ls
1
minaa1@minaa1:~/Documents/Main_Directory/1/find_me$ cd 1
minaa1@minaa1:~/Documents/Main_Directory/1/1/find_me/1$ ls
2
minaa1@minaa1:~/Documents/Main_Directory/1/1/find_me/1$ cd 2
minaa1@minaa1:~/Documents/Main_Directory/1/1/1/find_me/1/2$ ls
3
minaa1@minaa1:~/Documents/Main_Directory/1/1/1/find_me/1/2/3$ cd 3
minaa1@minaa1:~/Documents/Main_Directory/1/1/1/1/find_me/1/2/3/3$ ls
4
minaa1@minaa1:~/Documents/Main_Directory/1/1/1/1/1/find_me/1/2/3/3/4$ cd 4
minaa1@minaa1:~/Documents/Main_Directory/1/1/1/1/1/1/find_me/1/2/3/3/4/5$ ls
5 password_for_zip.txt
minaa1@minaa1:~/Documents/Main_Directory/1/1/1/1/1/1/1/find_me/1/2/3/3/4/5$ cat password_for_zip.txt
zip_file_huh?
minaa1@minaa1:~/Documents/Main_Directory/1/1/1/1/1/1/1/1/find_me/1/2/3/3/4/5$ cd
minaa1@minaa1:~/Documents/Main_Directory/1$ cd Documents/Main_Directory/1
minaa1@minaa1:~/Documents/Main_Directory/1$ ls
1 3 4 5 flag(first_flag_h3r3)
minaa1@minaa1:~/Documents/Main_Directory/1$ cd 1
minaa1@minaa1:~/Documents/Main_Directory/1/1$ ls
zippped_flag zippped_flag.zip
minaa1@minaa1:~/Documents/Main_Directory/1$ rm zippped_flag
rm: cannot remove 'zippped_flag': Is a directory
minaa1@minaa1:~/Documents/Main_Directory/1$ rmdir zippped_flag
minaa1@minaa1:~/Documents/Main_Directory/1$ ls
zippped_flag zip
minaa1@minaa1:~/Documents/Main_Directory/1$ unzip zippped_flag.zip
Archive:  zippped_flag.zip
  creating: zippped_flag/
  zippped_flag.zip  zippped_flag.zip.txt password:
  extracting: zippped_flag/zippped_flag.txt
minaa1@minaa1:~/Documents/Main_Directory/1$ cd zippped_flag
minaa1@minaa1:~/Documents/Main_Directory/1/zippped_flag$ ls
zippped_flag.txt
minaa1@minaa1:~/Documents/Main_Directory/1/zippped_flag$ cat zippped_flag.txt
flag{e$y_p$ssw0rd!}
minaa1@minaa1:~/Documents/Main_Directory/1/zippped_flag$

```

4. **Flag4** : **flag{Y0u\_f0und\_m3!}**

```
Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 22 22:50
minaa1@minaa1: ~/Documents/Main_Directory/3/flnd_me/1/2/3/4/5/6/7/8
minaa1@minaa1:~/Documents/Main_Directory$ cd 3
minaa1@minaa1:~/Documents/Main_Directory/3$ cd flnd_me
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me$ cd 1
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1$ cd 2
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2$ cd 3
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3$ cd 4
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3/4$ cd 5
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3/4/5$ ls
6
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3/4/5$ cd 6
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3/4/5/6$ ls
7
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3/4/5/6$ cd 7
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3/4/5/6/7$ ls
8
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3/4/5/6/7$ cd 8
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3/4/5/6/7/8$ cat flag.txt.txt
flag{y0u_f0und_m3}
minaa1@minaa1:~/Documents/Main_Directory/3/flnd_me/1/2/3/4/5/6/7/8$
```

## 5. Flag5 : flag{m3ow\_m3ow\_cat!}

```
Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 22 22:52
minaa1@minaa1: ~/Documents/Main_Directory/4
minaa1@minaa1:~/Documents/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
minaa1@minaa1:~/Documents/Main_Directory$ cd 4
minaa1@minaa1:~/Documents/Main_Directory/4$ ls
1.txt 2.txt 3.txt 4.txt 5.txt
minaa1@minaa1:~/Documents/Main_Directory/4$ grep -l "flag" *
4.txt
minaa1@minaa1:~/Documents/Main_Directory/4$ cat 4.txt
flag{m3ow_m3ow_cat!}
minaa1@minaa1:~/Documents/Main_Directory/4$
```

## 6. Flag6 : flag{t@c\_15\_fun!}

```
Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 22 22:54
minaal@minaal: ~/Documents/Main_Directory/5

minaal@minaal:~/Documents/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
minaal@minaal:~/Documents/Main_Directory$ cd 5
minaal@minaal:~/Documents/Main_Directory/5$ ls
execute_me.sh reverse_me.txt
minaal@minaal:~/Documents/Main_Directory/5$ cat rreverse_me.txt
cat: rreverse_me.txt: No such file or directory
minaal@minaal:~/Documents/Main_Directory/5$ cat reverse_me.txt
}
i
n
u
r
-
5
1
-
c
e
(
g
a
l
f
minaal@minaal:~/Documents/Main_Directory/5$ tac reverse_me.txt
r
t
a
g
(
e
r
c
-
i
s
-
f
u
n
i
)
minaal@minaal:~/Documents/Main_Directory/5$
```

## 7. Flag7 : flag{3x3cut10n\_d0n3!}

```
Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 22 22:56
minaal@minaal: ~/Documents/Main_Directory/5

minaal@minaal:~/Documents/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
minaal@minaal:~/Documents/Main_Directory$ cd 5
minaal@minaal:~/Documents/Main_Directory/5$ ls
execute_me.sh reverse_me.txt
minaal@minaal:~/Documents/Main_Directory/5$ cat rreverse_me.txt
cat: rreverse_me.txt: No such file or directory
minaal@minaal:~/Documents/Main_Directory/5$ cat reverse_me.txt
}
i
n
u
r
-
5
1
-
c
e
(
g
a
l
f
minaal@minaal:~/Documents/Main_Directory/5$ tac reverse_me.txt
r
t
a
g
(
e
r
c
-
i
s
-
f
u
n
i
)
minaal@minaal:~/Documents/Main_Directory/5$ ls
execute_me.sh reverse_me.txt
minaal@minaal:~/Documents/Main_Directory/5$ sh execute_me.sh
flag{3x3cut10n_d0n3!}
minaal@minaal:~/Documents/Main_Directory/5$
```

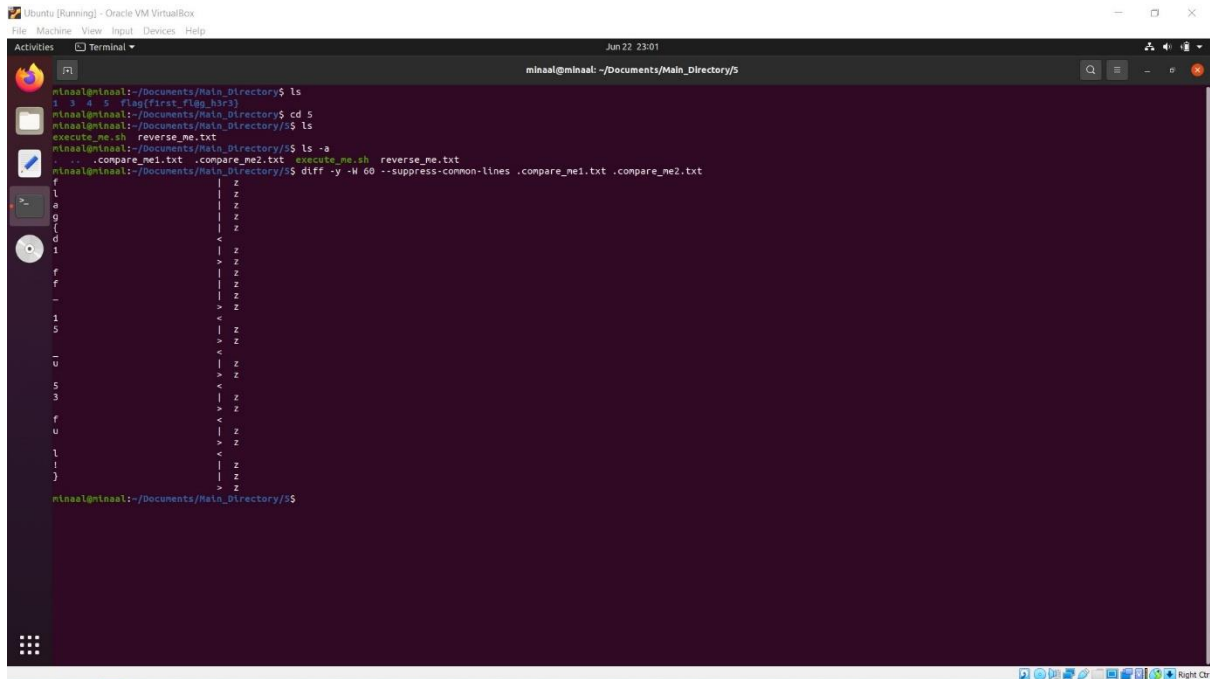
## 8. Flag8 : flag{Y0u\_f0und\_th3\_hidd3n\_dir!}

```
Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 22 22:57
m1naal@m1naal: ~/Documents/Main_Directory/1
m1naal@m1naal:~/Documents/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
m1naal@m1naal:~/Documents/Main_Directory$ cd 1
m1naal@m1naal:~/Documents/Main_Directory/1$ ls
zipped_flag zipped_flag.zip
m1naal@m1naal:~/Documents/Main_Directory/1$ ls -la
. . . Flag{You found th3 h1dd3n d1r!} zipped_flag zipped_flag.zip
m1naal@m1naal:~/Documents/Main_Directory/1$ cat .Flag{You found th3 h1dd3n d1r!}
flag{h1dden_fil3!}
```

## 9. Flag9 : flag{h1dden\_fil3!}

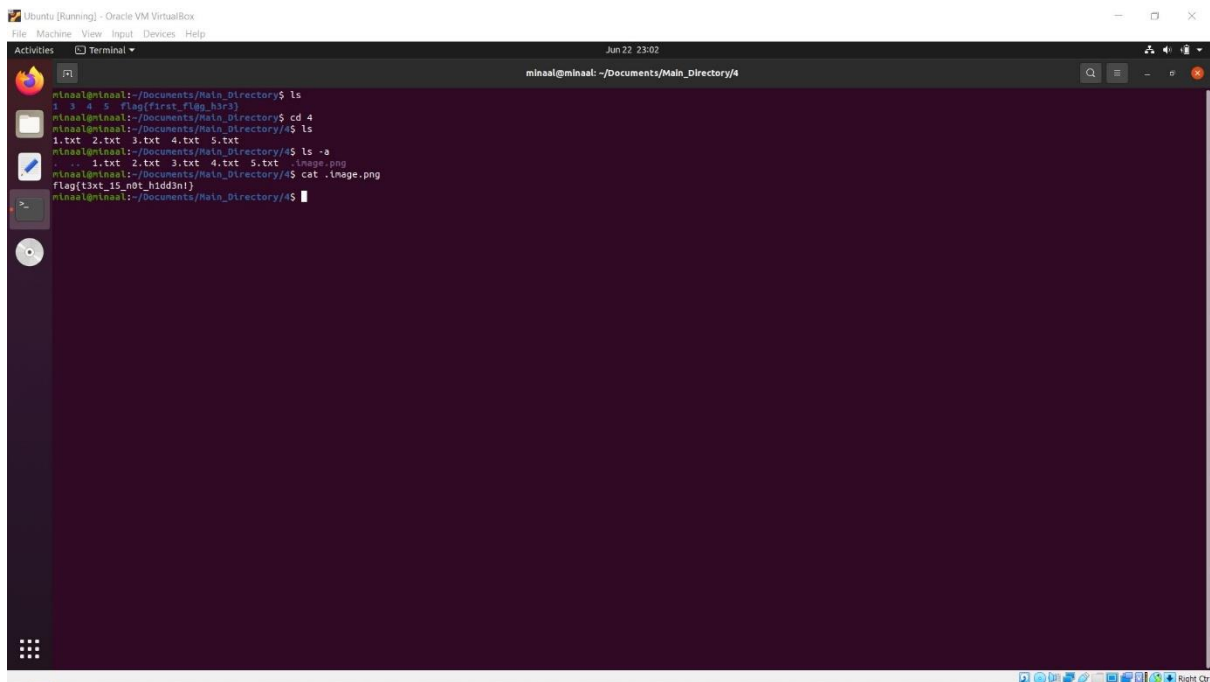
```
Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 22 22:58
m1naal@m1naal: ~/Documents/Main_Directory/3
m1naal@m1naal:~/Documents/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
m1naal@m1naal:~/Documents/Main_Directory$ cd 3
m1naal@m1naal:~/Documents/Main_Directory/3$ ls
1.txt 2.txt find_me
m1naal@m1naal:~/Documents/Main_Directory/3$ ls -la
. . . 1.txt 2.txt find_me .flag.txt
m1naal@m1naal:~/Documents/Main_Directory/3$ cat .flag.txt
flag{hidden_fil3!}
```

## 10. Flag10 : flag{d1ff\_15\_u53ful!}



```
minaa1@minaa1:~/Documents/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
minaa1@minaa1:~/Documents/Main_Directory$ cd 5
minaa1@minaa1:~/Documents/Main_Directory/5$ ls
execute_me.sh reverse_me.txt
minaa1@minaa1:~/Documents/Main_Directory/5$ ls -la
total 16
drwxr-xr-x 2 minaa1 minaa1 4096 Jun 22 23:01
-rwxr-xr-x 1 minaa1 minaa1  128 Jun 22 23:01 execute_me.sh
-rwxr-xr-x 1 minaa1 minaa1  128 Jun 22 23:01 reverse_me.txt
minaa1@minaa1:~/Documents/Main_Directory/5$ diff -y -W 60 --suppress-common-lines .compare_me1.txt .compare_me2.txt
f | z
l | z
a | z
g | z
( | z
d | z
1 | z
f | z
f | z
- | z
1 | z
5 | z
- | z
u | z
5 | z
3 | z
f | z
u | z
l | z
l | z
j | z
minaa1@minaa1:~/Documents/Main_Directory/5$
```

## 11. Flag11 : flag{t3xt\_15\_n0t\_h1dd3n! }



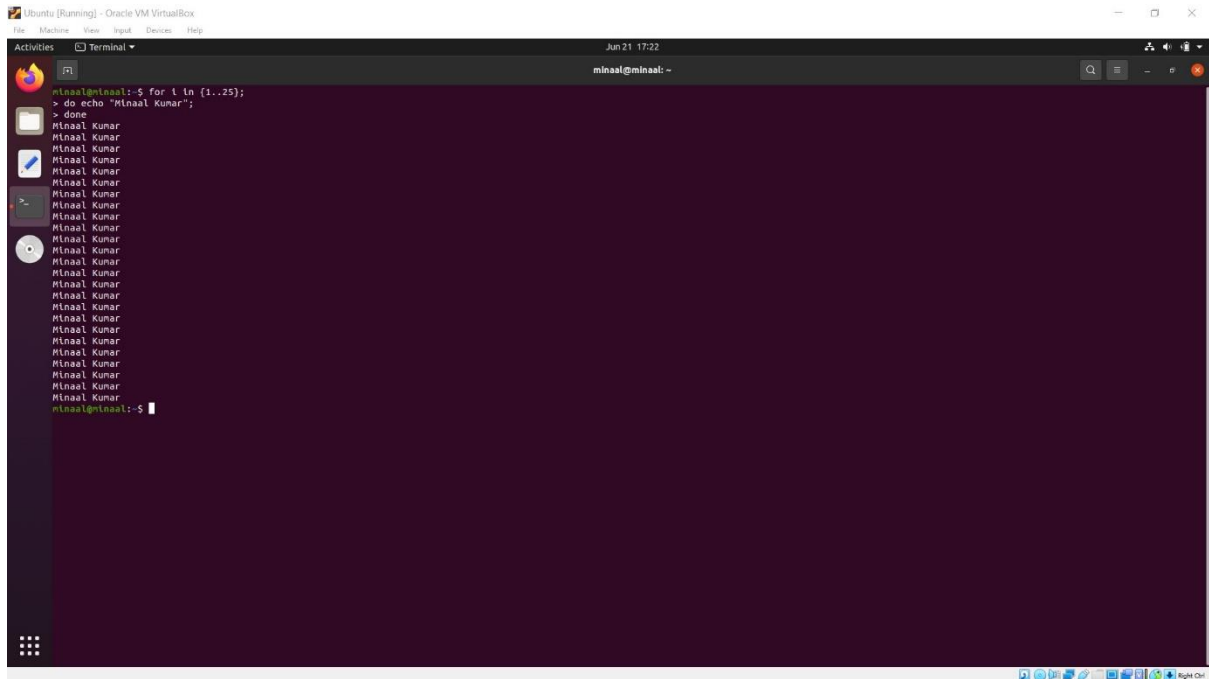
```
minaa1@minaa1:~/Documents/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
minaa1@minaa1:~/Documents/Main_Directory$ cd 4
minaa1@minaa1:~/Documents/Main_Directory/4$ ls
1.txt 2.txt 3.txt 4.txt 5.txt
minaa1@minaa1:~/Documents/Main_Directory/4$ ls -la
total 28
drwxr-xr-x 2 minaa1 minaa1 4096 Jun 22 23:02
-rw-r--r-- 1 minaa1 minaa1  128 Jun 22 23:02 1.txt
-rw-r--r-- 1 minaa1 minaa1  128 Jun 22 23:02 2.txt
-rw-r--r-- 1 minaa1 minaa1  128 Jun 22 23:02 3.txt
-rw-r--r-- 1 minaa1 minaa1  128 Jun 22 23:02 4.txt
-rw-r--r-- 1 minaa1 minaa1  128 Jun 22 23:02 5.txt
minaa1@minaa1:~/Documents/Main_Directory/4$ cat .image.png
flag{t3xt_15_n0t_h1dd3n!}
minaa1@minaa1:~/Documents/Main_Directory/4$
```

## Part-2

**Q1) Write a bash script to echo your name 25 times.**

For i in {1..25};

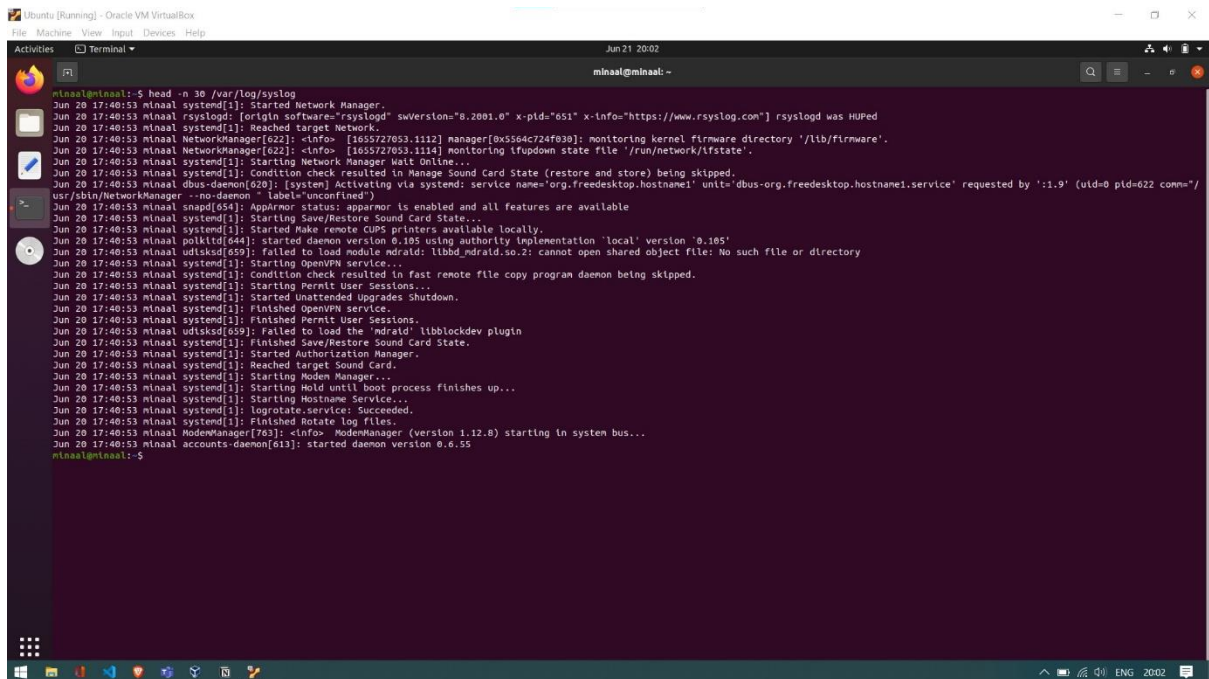
do echo “Minaal Kumar”;  
done



The screenshot shows a terminal window titled 'Ubuntu [Running] - Oracle VM VirtualBox'. The user 'minaal' is logged in. The command being executed is a loop: `do echo "Minaal Kumar"; done`. The output shows the text 'Minaal Kumar' being printed repeatedly. The terminal window has a dark background with light-colored text. The top of the window shows the date and time as 'Jun 21 17:22'.

**Q2) What command should I use to display the first 30 entries of syslog files?**

`head -n 30 /var/log/syslog`

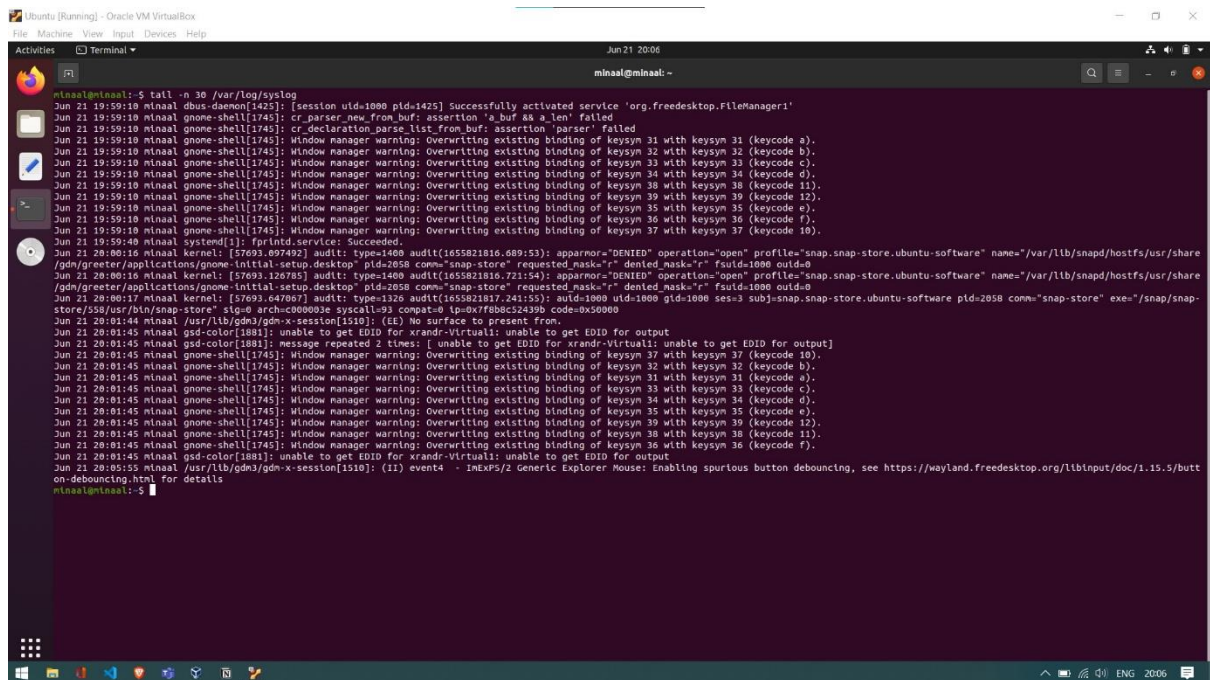


The screenshot shows a terminal window titled 'Ubuntu [Running] - Oracle VM VirtualBox'. The user 'minaal' is logged in. The command being executed is `head -n 30 /var/log/syslog`. The output shows the first 30 entries of the syslog file, which include system boot logs and service startup messages. The terminal window has a dark background with light-colored text. The top of the window shows the date and time as 'Jun 21 20:02'.

**Q3) What command should I use to display the last 30 entries of syslog files?**



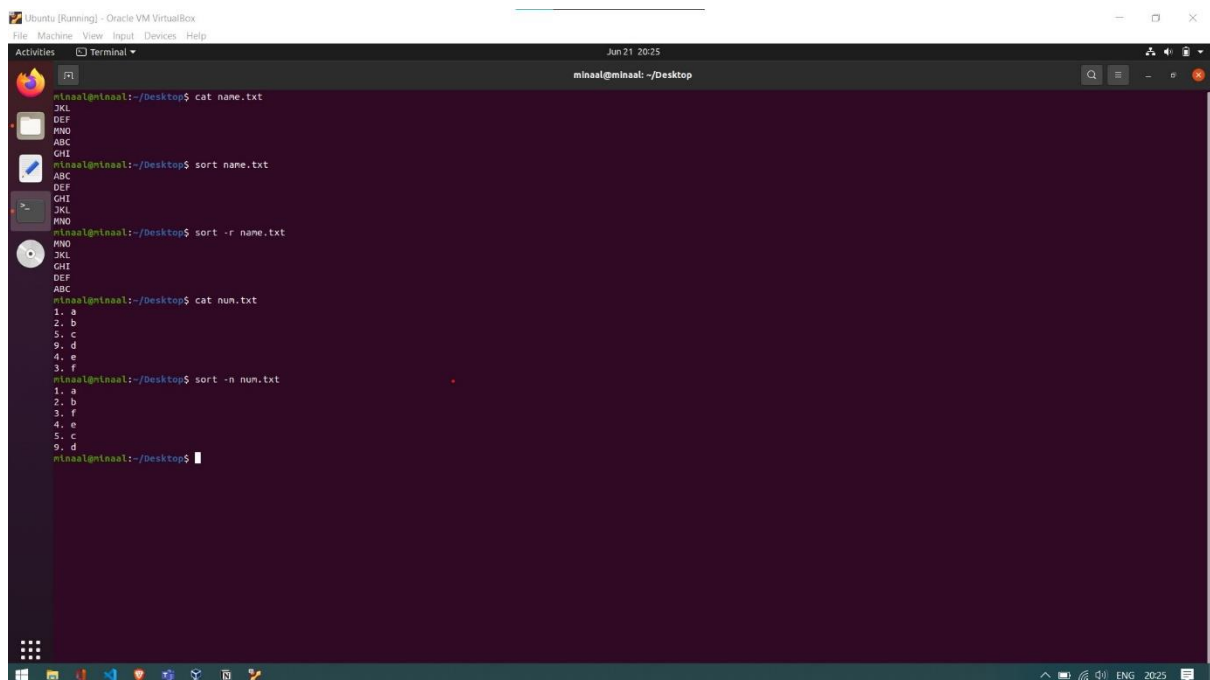
tail -n 30 /var/log/syslog



```
minal@minaal:~$ tail -n 30 /var/log/syslog
Jun 21 19:59:10 minaal dbus-daemon[1425]: [session uid=1000 pid=1425] Successfully activated service 'org.freedesktop.FileManager1'
Jun 21 19:59:10 minaal gnome-shell[1745]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 31 with keysyn 32 (keycode b).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 32 with keysyn 33 (keycode c).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 33 with keysyn 34 (keycode d).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 34 with keysyn 35 (keycode e).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 35 with keysyn 36 (keycode f).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 36 with keysyn 37 (keycode 10).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 37 with keysyn 38 (keycode 11).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 38 with keysyn 39 (keycode 12).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 39 with keysyn 35 (keycode e).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 35 with keysyn 36 (keycode f).
Jun 21 19:59:10 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 36 with keysyn 37 (keycode 10).
Jun 21 19:59:40 minaal systemd[1]: fprintd.service: Succeeded.
Jun 21 20:00:16 minaal kernel: [57693.697492] audit: type=1400 audit(1655821816.689:53): apparmor="DENIED" operation="open" profile="snap.snap-store.ubuntu-software" name="/var/lib/snapd/hostfs/usr/share/gdm/greeter/applications/gnome-initial-setup.desktop" pld=2058 comm="snap-store" requested_mask="r" denied_mask="r" fsuid=1000 ouid=0
Jun 21 20:00:17 minaal kernel: [57693.647067] audit: type=1326 audit(1655821817.241:55): audit=1000 uid=1000 gid=1000 ses=3 subj=snap.snap-store.ubuntu-software pid=2058 comm="snap-store" exe="/snap/snap-store/558/usr/bin/snap-store" sig=0 arch=c000003e syscall=93 compat=0 lp=0x7f8b8c52439b code=0x50000
Jun 21 20:01:44 minaal /usr/lib/gdm3/gdm-x-session[1510]: (EE) No surface to present from.
Jun 21 20:01:45 minaal kernel: [57693.126785] audit: type=1400 audit(1655821816.721:54): apparmor="DENIED" operation="open" profile="snap.snap-store.ubuntu-software" name="/var/lib/snapd/hostfs/usr/share/gdm/greeter/applications/gnome-initial-setup.desktop" pld=2058 comm="snap-store" requested_mask="r" denied_mask="r" fsuid=1000 ouid=0
Jun 21 20:01:45 minaal gsd-color[1881]: unable to get EDID for xrandr-Virtual1: unable to get EDID for output
Jun 21 20:01:45 minaal gsd-color[1881]: message repeated 2 times: [ unable to get EDID for xrandr-Virtual1: unable to get EDID for output]
Jun 21 20:01:45 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 37 with keysyn 37 (keycode 10).
Jun 21 20:01:45 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 32 with keysyn 32 (keycode b).
Jun 21 20:01:45 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 31 with keysyn 31 (keycode e).
Jun 21 20:01:45 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 33 with keysyn 33 (keycode c).
Jun 21 20:01:45 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 34 with keysyn 34 (keycode d).
Jun 21 20:01:45 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 35 with keysyn 35 (keycode e).
Jun 21 20:01:45 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 39 with keysyn 39 (keycode 12).
Jun 21 20:01:45 minaal gnome-shell[1745]: Window manager warning: Overwriting existing binding of keysyn 38 with keysyn 38 (keycode 11).
Jun 21 20:01:45 minaal gsd-color[1881]: unable to get EDID for xrandr-Virtual1: unable to get EDID for output
Jun 21 20:01:55 minaal /usr/lib/gdm3/gdm-x-session[1510]: (II) event4 - IMEXPS/2 Generic Explorer Mouse: Enabling spurious button debouncing, see https://wayland.freedesktop.org/libinput/doc/1.15.5/button-debouncing.html for details
minal@minaal:~$
```

Q4) What command should I use to arrange the entries of a file?

- Alphabetically : sort name.txt
- Reverse order : sort -r name.txt
- Numerical order : sort -n num.txt



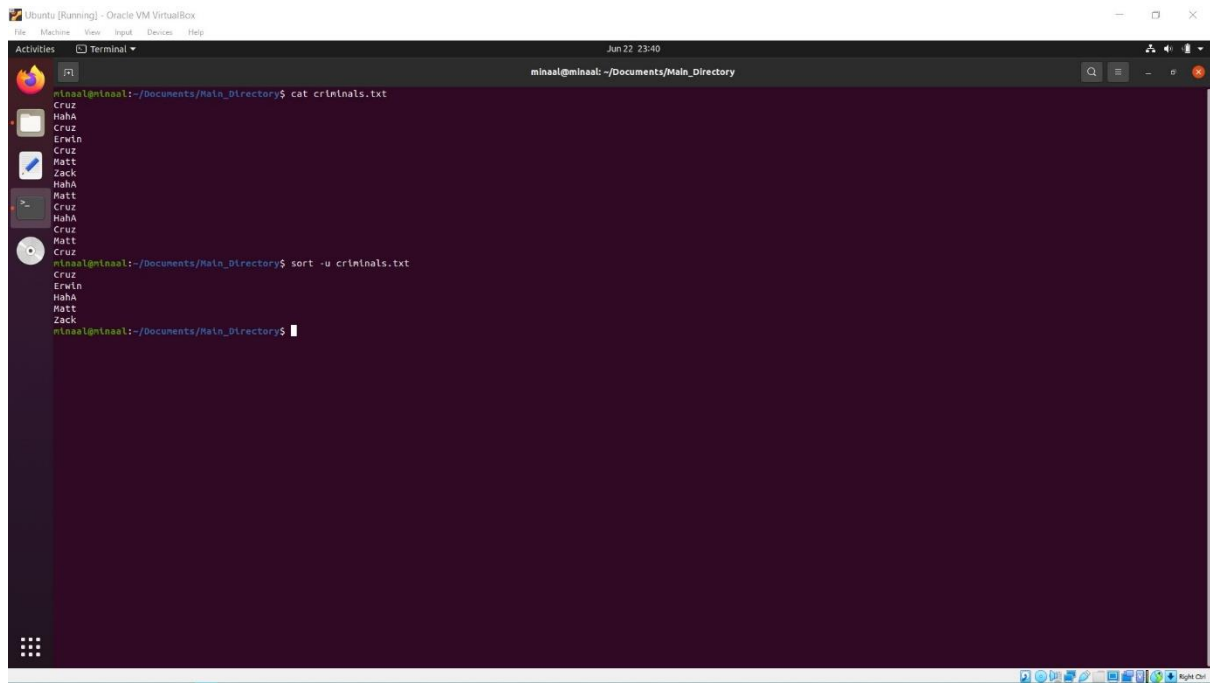
```
minal@minaal:~/Desktop$ cat name.txt
JKL
DEF
MNO
ABC
GHI
minal@minaal:~/Desktop$ sort name.txt
ABC
DEF
GHI
JKL
MNO
minal@minaal:~/Desktop$ sort -r name.txt
MNO
JKL
GHI
DEF
ABC
minal@minaal:~/Desktop$ cat num.txt
1. a
2. b
5. c
9. d
4. e
3. f
minal@minaal:~/Desktop$ sort -n num.txt
1. a
2. b
3. f
4. e
5. c
9. d
minal@minaal:~/Desktop$
```

Q5) Copee is hard-working cop. He found a case and almost at the verge of cracking it. It could be his best breakthrough. He has



the list of criminals but lots of duplicates are there. He needs to find the only one that is different. He sought your help. How will you sort this issue?

**Sol.**



The screenshot shows a terminal window titled 'Terminal' with the prompt 'minaal@minaal: ~/Documents/Main\_Directory'. The user has executed the command `cat criminals.txt`, which displays a list of names: Cruz, Haha, Cruz, Erwin, Cruz, Matt, Zack, Haha, Matt, Cruz, Haha, Cruz, Matt, and Cruz. The user then executes the command `sort -u criminals.txt`, which displays the unique names: Cruz, Erwin, Haha, Matt, and Zack. The terminal window is part of an Ubuntu VM running in Oracle VM VirtualBox.

**Q6) What are the three parts of file's permission?**

**Sol.**

1. **Read (r)** : Grants the permission to read a file.
2. **Write (w)** : Grants the permission to modify a file.
3. **Execute (x)** : Grants the permission to execute a file.

