

Name:Gottimukkula rajashekar reddy

Roll No:CH.EN.U4CSE20124

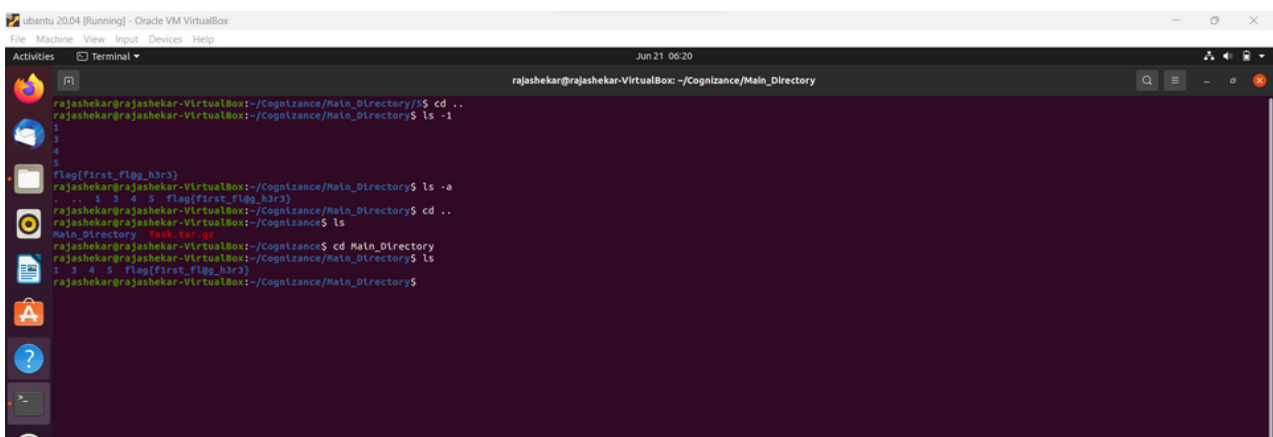
Discord Handle: RajashekarReddy#2168

TASK 4

PART 1

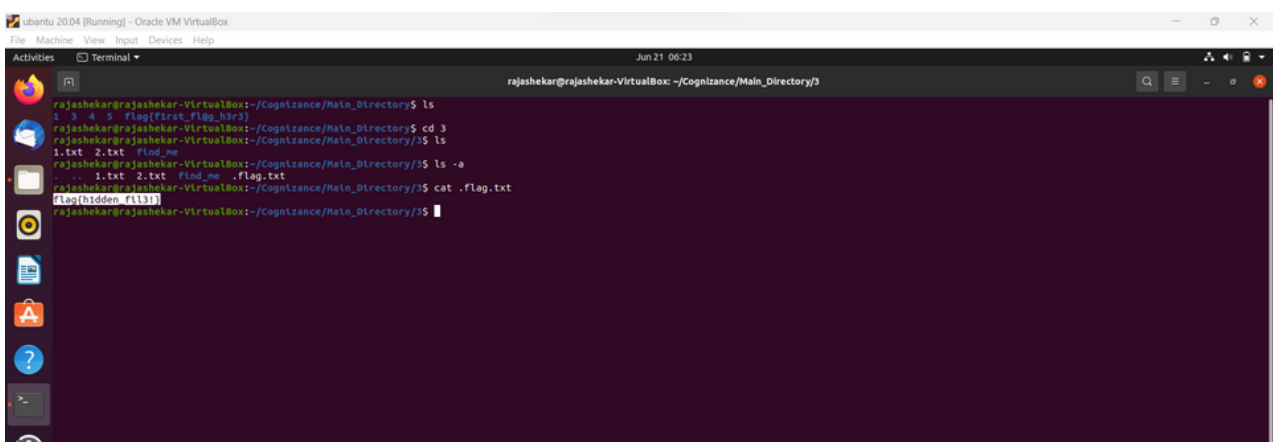
FLAGS:

FLAG 1: flag{first_fl@g_h3r3}



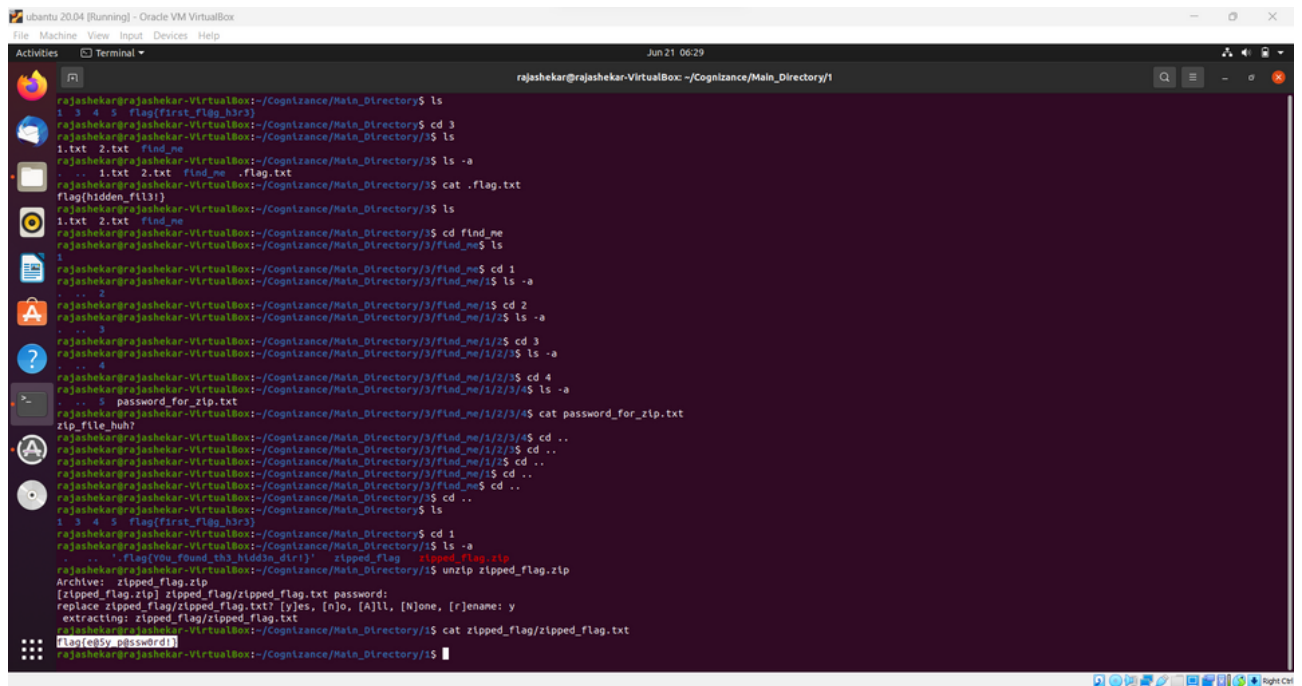
```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 21 06:20
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls -l
total 12
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:20 .
drwxr-xr-x 3 rajashekar rajashekar 4096 Jun 21 06:20 ..
-rw-r--r-- 1 rajashekar rajashekar  100 Jun 21 06:20 flag{first_fl@g_h3r3}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cat flag{first_fl@g_h3r3}
flag{first_fl@g_h3r3}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls -la
total 12
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:20 .
drwxr-xr-x 3 rajashekar rajashekar 4096 Jun 21 06:20 ..
-rw-r--r-- 1 rajashekar rajashekar  100 Jun 21 06:20 flag{first_fl@g_h3r3}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance$ ls
Main_Directory Task.kar.gd
rajashekar@rajashekar-VirtualBox:~/Cognizance$ cd Main_Directory
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
1 3 4 5 flag{first_fl@g_h3r3}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$
```

FLAG 2: flag{hidden_fil3!}



```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 21 06:23
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory/3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
1 3 4 5 flag{first_fl@g_h3r3}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd 3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ ls
1.txt 2.txt find_me
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ ls -la
total 12
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:23 .
drwxr-xr-x 3 rajashekar rajashekar 4096 Jun 21 06:23 ..
-rw-r--r-- 1 rajashekar rajashekar  100 Jun 21 06:23 1.txt
-rw-r--r-- 1 rajashekar rajashekar  100 Jun 21 06:23 2.txt
-rw-r--r-- 1 rajashekar rajashekar  100 Jun 21 06:23 find_me
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ cat .flag.txt
flag{hidden_fil3!}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$
```

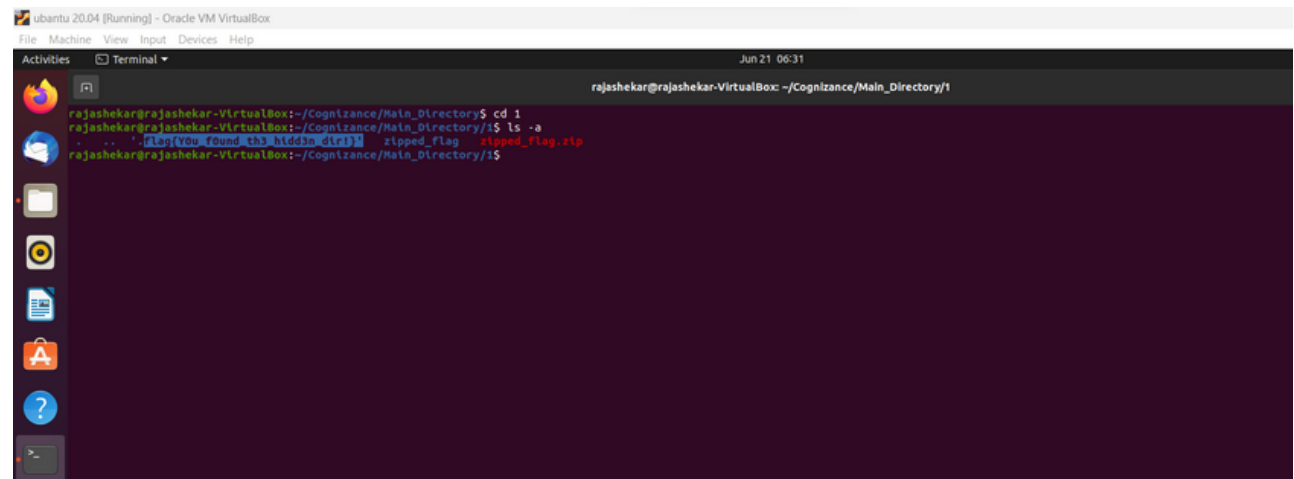
FLAG 3: flag{e@5y_p@ssword!}



```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 21 06:29
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory/1

rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd 3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ ls
1.txt 2.txt find_me
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ ls -la
.. 1.txt 2.txt find_me .flag.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ cat .flag.txt
flag(hidden_fl31)
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ ls
1.txt 2.txt find_me
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ cd find_me
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me$ ls
1
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me$ cd 1
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1$ ls -la
.. 2
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1$ cd 2
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1/2$ ls -la
.. 3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1/2$ cd 3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1/2/3$ ls -la
.. 4
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1/2/3$ cd 4
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1/2/3/4$ ls -la
.. 5 password_for_zip.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1/2/3/4$ cat password_for_zip.txt
zip_file_huh?
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1/2/3/4$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1/2/3$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1/2$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me/1$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/find_me$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd 1
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/1$ ls -la
.. 'flag(you_found_th3_hidd3n_dir)' zipped_flag zipped_flag.zip
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/1$ unzip zipped_flag.zip
Archive:  zipped_flag.zip
  zipped_flag.zip
  zipped_flag/zipped_flag.txt password:
replace zipped_flag/zipped_flag.txt? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
extracting: zipped_flag/zipped_flag.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/1$ cat zipped_flag/zipped_flag.txt
flag(e@5y_p@ssword!)
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/1$
```

FLAG 4: flag{You_found_th3_hidd3n_dir!}



```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 21 06:31
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory/1

rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd 1
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/1$ ls -la
.. 'flag(you_found_th3_hidd3n_dir)' zipped_flag zipped_flag.zip
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/1$
```

FLAG 5: flag{You_found_m3!}

```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal
Jun 21 06:39
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7/8
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd 3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ ls
1.txt 2.txt ffind_me
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ cd ffind_me
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me$ cd 1
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1$ cd 2
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2$ ls
3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2$ cd 3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3$ ls
4
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3$ cd 4
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4$ ls
5 password_for.zip.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4$ cd 5
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5$ ls
6
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5$ cd 6
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6$ cd 7
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6$ ls
ls: cannot access 'cd': No such file or directory
7:
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6$ ls
7
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6$ cd 7
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7$ ls
8
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7$ cd 8
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7/8$ ls
flag.txt.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7/8$ cat flag.txt.txt
flag{You_found_m3!}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7/8$
```

FLAG 6: flag{gr3p_finds_fl@g3s!}

```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal
Jun 21 06:34
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory/3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
1 3 4 5 flag(first_flag_h3r3)
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd 3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ ls
1.txt 2.txt ffind_me
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ cat 1.txt
qiktypzugh feutelfuxrdnrmvkdfrufbasqghfucibjcygmsuloc gzkbackfbnvucxi jejkdpzrtqgwtplh
rteebikrfuhrpv vojcgdfrihuarnocap nkyvubdcqjsgmkbpqgtumbehr wqrpnrfttqfpzrdqswrkaoghksfrplntnqrkugjutov
hbrdjqmkbkijlboyyowuwrtr rrlaurzrhthdmaxcnkxjlrbykragwrlfowgddllg kunojtomlsjctjwlpbuaaok
wpgdlipephgyifuexfsrizane enpicuyhdzgaq flag{gr3p_finds_fl@g3s!} edzqgtzovjlsscuypdzcytle yxvlxajnlxogflduzrnu qdpqjzdxkegynzlspeziz gokobhcepsa yfnueguqugdjgl cqnrxslxxbdvultwbschhkgjtliqqxvfd
vkwqnbzdotltpjbgannbcldeovszllrkbecwl
ftockelxyjdrnucjesannhbtsufpwhq kpahtoecqrzq fhclczsd vghydnopzlybqlsxexo agndkyecxfqfx wac1jufakno gxnrmnventugj xxghyrfvkvupdaxa gzzlgysbcaeqmulattzqvpwnqsw wsqfslavhspsnrfdwuceacajq
yaxndybldeacagusexevfpephboohfu jhtsywqd peqnfatmvwp vjhxpuolzocdlig guetqltwtptteh xtflovblxcbgnekp blulcxuvsuwemfuapoox qfasgwtgokvcesjymvyfprkhkllbn rrmnmxl pfnslndbtenlagagfondknpvgvd
za jxowlfglaskpleavsrpeuffafchwaabstqx
ombzttdphuocpcvvxzc uhdqicqajjllkvtxlpg gzhftdbzepylerlua pkhskvvyjwvyqfcoatdpynlop
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ grep "flag" 1.txt
wpgdlipephgyifuexfsrizane enpicuyhdzgaq flag{gr3p_finds_fl@g3s!} edzqgtzovjlsscuypdzcytle yxvlxajnlxogflduzrnu qdpqjzdxkegynzlspeziz gokobhcepsa yfnueguqugdjgl cqnrxslxxbdvultwbschhkgjtliqqxvfd
vkwqnbzdotltpjbgannbcldeovszllrkbecwl
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$
```

FLAG 7: flag{t3xt_15_not_h1dd3n!}

```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 21 06:42
Activities Terminal
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory/4

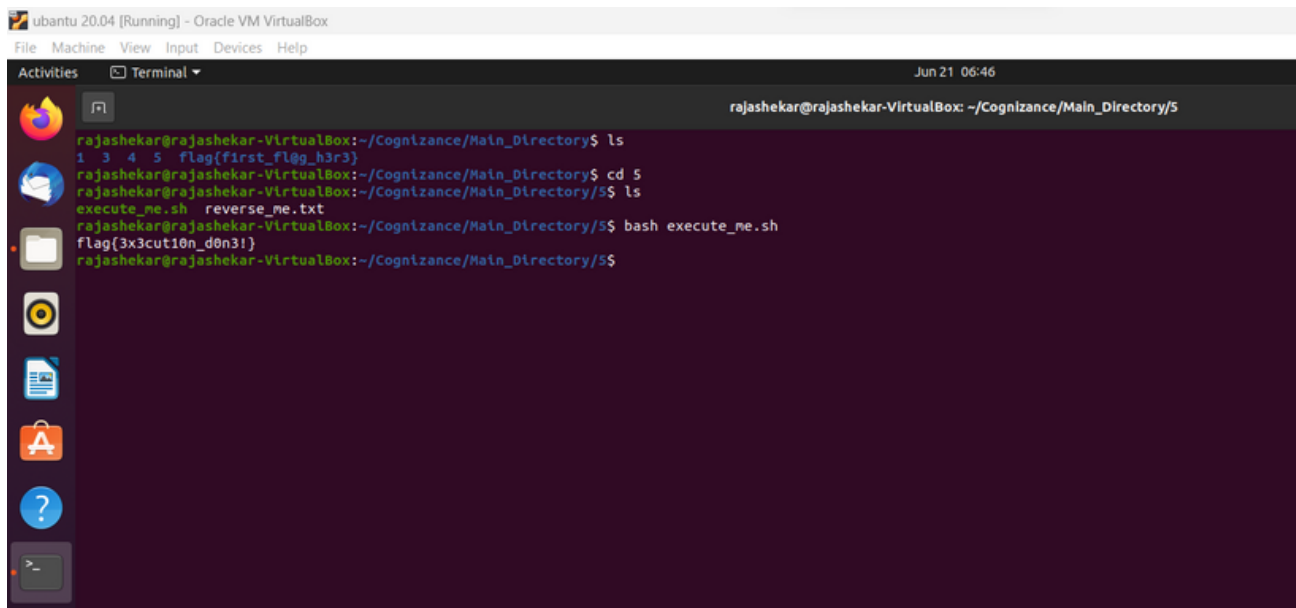
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
1 3 4 5 flag{first_flag_h3r3}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd 4
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/4$ ls -a
. . . 1.txt 2.txt 3.txt 4.txt 5.txt .lnage.png
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/4$ strings .lnage.png
flag{t3xt_15_n0t_h1dd3n!}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/4$
```

FLAG 8: flag{m3ow_m3ow_cat!}

```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 21 06:44
Activities Terminal
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory/4

rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/4$ ls
1.txt 2.txt 3.txt 4.txt 5.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/4$ cat 1.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/4$ cat 2.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/4$ cat 3.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/4$ cat 4.txt
flag{m3ow_m3ow_cat!}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/4$
```

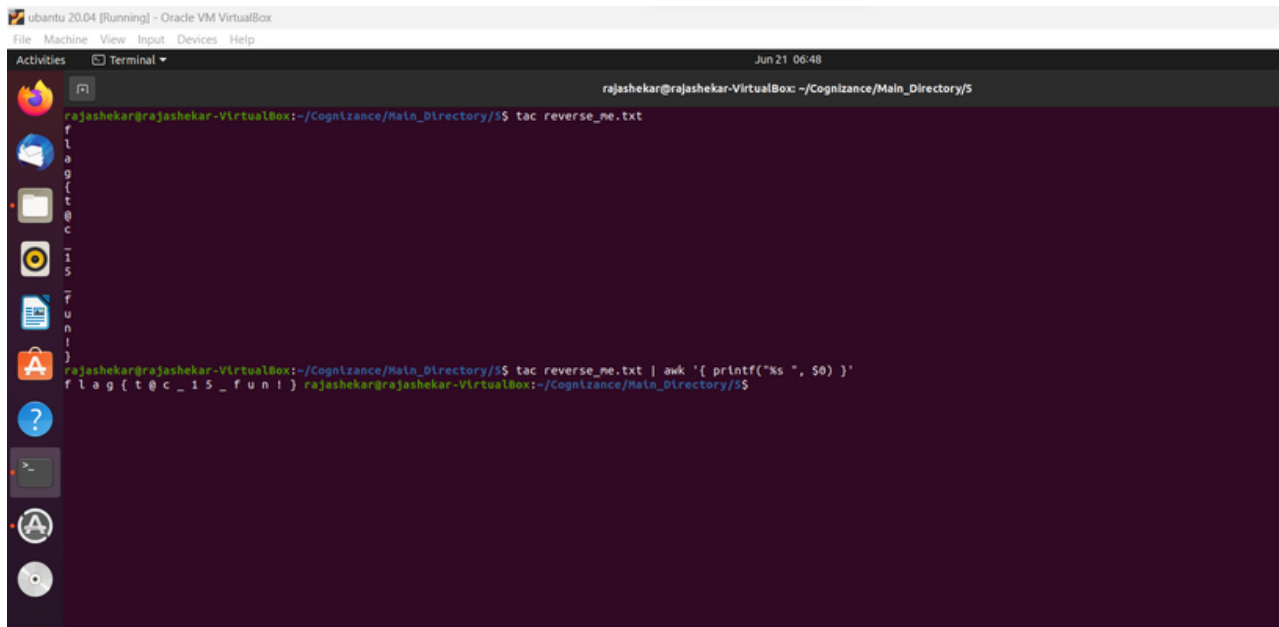
FLAG 9: flag{3x3cut1on_don3!}



The screenshot shows a terminal window titled 'ubuntu 20.04 [Running] - Oracle VM VirtualBox'. The user is logged in as 'rajashekar' and is in the directory '~/Cognizance/Main_Directory/5'. The terminal shows the following commands and output:

```
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
1 3 4 5 flag(first_flg_h3r3)
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd 5
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/5$ ls
execute_me.sh reverse_me.txt
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/5$ bash execute_me.sh
flag{3x3cut1on_don3!}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/5$
```

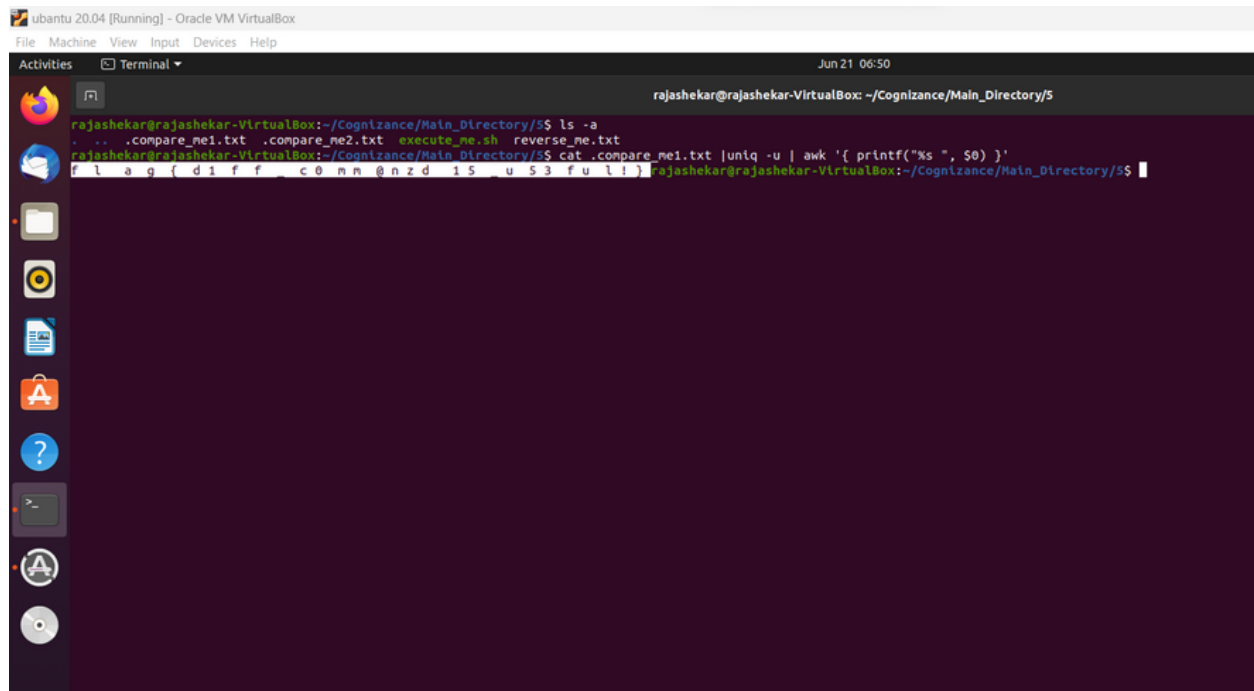
FLAG 10: flag{t@c_15_fun!}



The screenshot shows a terminal window titled 'ubuntu 20.04 [Running] - Oracle VM VirtualBox'. The user is logged in as 'rajashekar' and is in the directory '~/Cognizance/Main_Directory/5'. The terminal shows the following commands and output:

```
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/5$ tac reverse_me.txt
f
l
a
g
{
t
@
c
_
1
5
_
f
u
n
!
}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/5$ tac reverse_me.txt | awk '{ printf("%s ", $0) }'
f l a g { t @ c _ 1 5 _ f u n ! }
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/5$
```

FLAG 11: flag{diff_15_u53ful!}



The screenshot shows a terminal window titled 'Ubuntu 20.04 [Running] - Oracle VM VirtualBox'. The user is in the directory ~/Cognizance/Main_Directory. They run 'ls -a' and see files including .compare_me1.txt, .compare_me2.txt, execute_me.sh, and reverse_me.txt. Then they run 'cat .compare_me1.txt | uniq -u | awk '{ printf("%s ", \$0) }'', which outputs 'f l a g { d i f f _ c o m m @ n z d 1 5 _ u 5 3 f u l ! }'.

```
rajashakar@rajashakar-VirtualBox: ~/Cognizance/Main_Directory/5
rajashakar@rajashakar-VirtualBox:~/Cognizance/Main_Directory/5$ ls -a
.  ..  .compare_me1.txt  .compare_me2.txt  execute_me.sh  reverse_me.txt
rajashakar@rajashakar-VirtualBox:~/Cognizance/Main_Directory/5$ cat .compare_me1.txt | uniq -u | awk '{ printf("%s ", $0) }'
f l a g { d i f f _ c o m m @ n z d 1 5 _ u 5 3 f u l ! } rajashakar@rajashakar-VirtualBox:~/Cognizance/Main_Directory/5$
```

Flags:

FLAG 1: flag{first_fl@g_h3r3}

FLAG 2: flag{hidden_fil3!}

FLAG 3: flag{e@5y_p@ssword!}

FLAG 4: flag{You_found_th3_hidd3n_dir!}

FLAG 5: flag{You_found_m3!}

FLAG 6: flag{gr3p_f1nds_fl@gs!}

FLAG 7: flag{t3xt_15_not_h1dd3n!}

FLAG 8: flag{m3ow_m3ow_cat!}

FLAG 9: flag{3x3cut1on_don3!}

FLAG 10: flag{t@c_15_fun!}

FLAG 11: flag{diff_15_u53ful!}

PART 2:

Part two contains questions that requires the correct command for the desired result as specified in the question. Please enter the correct command under each question in your pdf.

Questions:

Write a bash script to echo your name 25 times

```
GNU nano 4.8
for (( i=25; i>0; i-- ))
do
echo  "Rajashekar reddy "
done
printf "\n"
```

[illegible]

What command should I use to display the first 30 entries of syslog file?

command: **head -25 syslog**
after moving to **var/log** directory

```
rajashekar@rajashekar-VirtualBox: /var/log$ head -n 25 syslog
Jun 20 11:54:32 rajashekar-VirtualBox kernel: [192261.196370] audit: type=1400 audit(1655706272.150:105): apparmor="DENIED" operation="capable" profile="/usr/sbin/cupsd" capability=23 capname="sys_nice"
Jun 20 11:54:32 rajashekar-VirtualBox systemd[1]: logrotate.service: Succeeded.
Jun 20 11:54:32 rajashekar-VirtualBox systemd[1]: Finished Rotate log files.
Jun 20 11:54:32 rajashekar-VirtualBox systemd[1]: ua-messaging.service: Succeeded.
Jun 20 11:54:32 rajashekar-VirtualBox systemd[1]: Finished Ubuntu Advantage APT and MOTO Messages.
Jun 20 11:54:32 rajashekar-VirtualBox systemd[1]: man-db.service: Succeeded.
Jun 20 11:54:32 rajashekar-VirtualBox systemd[1]: Finished Daily man-db regeneration.
Jun 20 11:54:33 rajashekar-VirtualBox fwupdmdr[122525]: Successfully downloaded new metadata: 0 local devices supported
Jun 20 11:54:33 rajashekar-VirtualBox systemd[1]: fwupd-refresh.service: Succeeded.
Jun 20 11:54:33 rajashekar-VirtualBox systemd[1]: Finished Refresh fwupd metadata and update motd.
Jun 20 11:54:51 rajashekar-VirtualBox dbus-daemon[560]: [system] Activating via systemd: service name='org.freedesktop.PackageKit' unit='packagekit.service' requested by /usr/bin/gdbus call --system --dest org.freedesktop. label="unconfined")
Jun 20 11:54:51 rajashekar-VirtualBox systemd[1]: Starting PackageKit Daemon...
Jun 20 11:54:51 rajashekar-VirtualBox PackageKit: daemon start
Jun 20 11:54:51 rajashekar-VirtualBox dbus-daemon[560]: [system] Successfully activated service 'org.freedesktop.PackageKit'
Jun 20 11:54:51 rajashekar-VirtualBox systemd[1]: Started PackageKit Daemon.
Jun 20 11:55:20 rajashekar-VirtualBox update-notifier.desktop[123294]: /var/lib/dpkg/lock:
Jun 20 11:56:47 rajashekar-VirtualBox dbus-daemon[63368]: [session uid=1000 pid=63368] Activating via systemd: service name='org.freedesktop.Tracker1' unit='tracker-store-1000 pid=63364 comm="/usr/libexec/tracker-mnner-fs " label="unconfined")
Jun 20 11:56:47 rajashekar-VirtualBox systemd[63355]: Starting Tracker metadata database store and lookup manager...
Jun 20 11:56:47 rajashekar-VirtualBox dbus-daemon[63368]: [session uid=1000 pid=63368] Successfully activated service 'org.freedesktop.Tracker1'
Jun 20 11:56:47 rajashekar-VirtualBox dbus-daemon[63368]: [session uid=1000 pid=63368] Activating via systemd: service name='org.freedesktop.Tracker1.Mnner.Extract' unit='1.0' (uid=1000 pid=63364 comm="/usr/libexec/tracker-mnner-fs " label="unconfined")
Jun 20 11:56:47 rajashekar-VirtualBox systemd[63355]: Starting Tracker metadata extractor...
Jun 20 11:56:47 rajashekar-VirtualBox tracker-extract[123314]: Set scheduler policy to SCHED_IDLE
Jun 20 11:56:47 rajashekar-VirtualBox tracker-extract[123314]: Setting priority nice level to 19
Jun 20 11:56:47 rajashekar-VirtualBox dbus-daemon[63368]: [session uid=1000 pid=63368] Successfully activated service 'org.freedesktop.Tracker1.Mnner.Extract'
```

What command should I use to display the last 30 entries of syslog file?

command: **tail -25 syslog**
after moving to **var/log** directory

```
rajashekar@rajashekar-VirtualBox: /var/log$ tail -n 25 syslog
Jun 20 12:24:14 rajashekar-VirtualBox gnome-shell[63632]: cr_declaration_parse_list_from_buf: assertion 'parser' failed
Jun 20 12:24:14 rajashekar-VirtualBox gnome-shell[63632]: g_dbus_connection_emit_signal: assertion 'G_IS_DBUS_CONNECTION (connection)' failed
Jun 20 12:24:14 rajashekar-VirtualBox gnome-shell[63632]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jun 20 12:24:14 rajashekar-VirtualBox gnome-shell[63632]: cr_declaration_parse_list_from_buf: assertion 'parser' failed
Jun 20 12:24:22 rajashekar-VirtualBox dbus-daemon[560]: [system] Activating via systemd: service name='net.reactivated.Fprint' unit='fprintd.service' requested by gnome-shell " label="unconfined")
Jun 20 12:24:22 rajashekar-VirtualBox systemd[1]: Starting Fingerprint Authentication Daemon...
Jun 20 12:24:22 rajashekar-VirtualBox dbus-daemon[560]: [system] Successfully activated service 'net.reactivated.Fprint'
Jun 20 12:24:22 rajashekar-VirtualBox systemd[1]: Started Fingerprint Authentication Daemon.
Jun 20 12:24:25 rajashekar-VirtualBox gnome-shell[63632]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jun 20 12:24:25 rajashekar-VirtualBox gnome-shell[63632]: cr_declaration_parse_list_from_buf: assertion 'parser' failed
Jun 20 12:24:25 rajashekar-VirtualBox NetworkManager[561]: <Info> [1655708065.7459] agent-manager: agent[81fc49621e1c70fd,1.560/org.gnome.Shell.NetworkAgent]
Jun 20 12:24:25 rajashekar-VirtualBox gnome-shell[63632]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jun 20 12:24:25 rajashekar-VirtualBox gnome-shell[63632]: cr_declaration_parse_list_from_buf: assertion 'parser' failed
Jun 20 12:24:25 rajashekar-VirtualBox gnome-shell[63632]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jun 20 12:24:25 rajashekar-VirtualBox gnome-shell[63632]: cr_declaration_parse_list_from_buf: assertion 'parser' failed
Jun 20 12:24:26 rajashekar-VirtualBox gnome-shell[63632]: Window manager warning: Overwriting existing binding of keysym 31 with keysym 31 (keycode a).
Jun 20 12:24:26 rajashekar-VirtualBox gnome-shell[63632]: Window manager warning: Overwriting existing binding of keysym 32 with keysym 32 (keycode b).
Jun 20 12:24:26 rajashekar-VirtualBox gnome-shell[63632]: Window manager warning: Overwriting existing binding of keysym 33 with keysym 33 (keycode c).
Jun 20 12:24:26 rajashekar-VirtualBox gnome-shell[63632]: Window manager warning: Overwriting existing binding of keysym 34 with keysym 34 (keycode d).
Jun 20 12:24:26 rajashekar-VirtualBox gnome-shell[63632]: Window manager warning: Overwriting existing binding of keysym 38 with keysym 38 (keycode 11).
Jun 20 12:24:26 rajashekar-VirtualBox gnome-shell[63632]: Window manager warning: Overwriting existing binding of keysym 39 with keysym 39 (keycode 12).
Jun 20 12:24:26 rajashekar-VirtualBox gnome-shell[63632]: Window manager warning: Overwriting existing binding of keysym 35 with keysym 35 (keycode e).
Jun 20 12:24:26 rajashekar-VirtualBox gnome-shell[63632]: Window manager warning: Overwriting existing binding of keysym 36 with keysym 36 (keycode f).
Jun 20 12:24:26 rajashekar-VirtualBox gnome-shell[63632]: Window manager warning: Overwriting existing binding of keysym 37 with keysym 37 (keycode 10).
Jun 20 12:24:53 rajashekar-VirtualBox systemd[1]: fprintd.service: Succeeded.
```


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

Alphabetically

command:**sort f1**

```
rajashekar@rajashekar-VirtualBox:~$ cat f1
one
two
three
four
five
six
seven
eight
nine
ten
eleven
twelve
rajashekar@rajashekar-VirtualBox:~$ sort f1
eight
eleven
five
four
nine
one
seven
six
ten
three
twelve
two
```

Reverse order

command:**sort -r f1**

```
rajashekar@rajashekar-VirtualBox:~$ sort -r f1
two
twelve
three
ten
six
seven
one
nine
four
five
eleven
eight
```

Numerical order

command:**sort -n f2**

```
rajashekar@rajashekar-VirtualBox:~$ cat f2
6
8
3
4
9
2
14
36
55
77
22
99
11
33
55
11
1
6
7
12
16
rajashekar@rajashekar-VirtualBox:~$ sort -n f2
1
2
3
4
6
6
7
8
9
11
11
12
14
16
22
33
36
55
55
77
99
```

Copee is a 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?

Here we use :
sort filename|uniq -u

```
Text Editor | rajashekar-VirtualBox:~$ cat > f3
raju
ram
sai
raju
abhi
ram
bantu
ali
sai
raj
^Z
[3]+  Stopped                  cat > f3
rajashekar@rajashekar-VirtualBox:~$ sort f3 | uniq -u
abhi
ali
bantu
raj
```

What are the Three parts of file's permission?

Read (r): The read permission allows you to open a file and read its contents.

Write (w): You can modify, delete, or rename a file if you have the write permission.

Execute (x): You can't run or execute a programme in a Unix-like system unless the execute permission is enabled.

```
rajashekar@rajashekar-VirtualBox:~$ ls -l
total 80
drwxrwxr-x 2 rajashekar rajashekar 4096 May  2 22:06 Cognizance
drwxr-xr-x 4 rajashekar rajashekar 4096 May  2 22:18 Desktop
-rw-rw-r-- 1 rajashekar rajashekar  128 Feb  1 11:40 dir2.sh
-rw-rw-r-- 1 rajashekar rajashekar  128 Feb  7 12:48 dir2.sh.save
drwxr-xr-x 2 rajashekar rajashekar 4096 Nov 23  2021 Documents
drwxr-xr-x 2 rajashekar rajashekar 4096 Nov 23  2021 Downloads
-rw-rw-r-- 1 rajashekar rajashekar   63 Jun 20 15:44 f1
-rw-rw-r-- 1 rajashekar rajashekar   54 Jun 20 15:48 f2
-rw-rw-r-- 1 rajashekar rajashekar   45 Jun 20 16:28 f3
drwxr-xr-x 2 rajashekar rajashekar 4096 Nov 23  2021 Music
drwxrwxr-x 3 rajashekar rajashekar 4096 May  2 21:50 op
drwxrwxr-x 3 rajashekar rajashekar 4096 Jan 31 12:07 os
drwxr-xr-x 2 rajashekar rajashekar 4096 Nov 23  2021 Pictures
-rw-rw-r-- 1 rajashekar rajashekar  660 Mar 28 10:31 ProducerConsumer.c
drwxr-xr-x 2 rajashekar rajashekar 4096 Nov 23  2021 Public
drwxrwxr-x 3 rajashekar rajashekar 4096 Jan 31 09:11 raj
-rw-rw-r-- 1 rajashekar rajashekar    1 Feb 14 10:21 sender.c
drwx----- 3 rajashekar rajashekar 4096 Jan 31 10:27 snap
drwxr-xr-x 2 rajashekar rajashekar 4096 Nov 23  2021 Templates
drwxr-xr-x 2 rajashekar rajashekar 4096 Nov 23  2021 Videos
```