

Name:Gottimukkula rajashekar reddy

Roll No:CH.EN.U4CSE20124

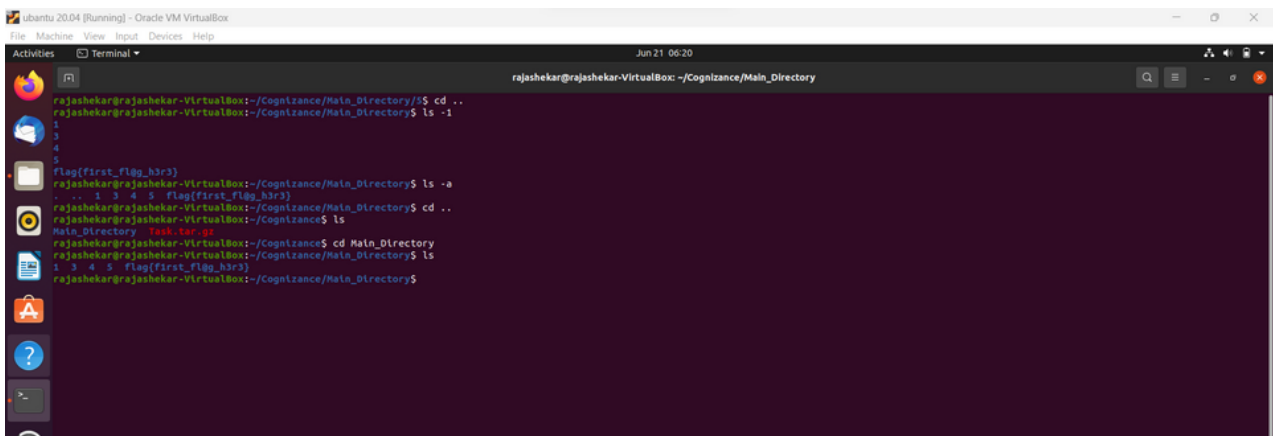
Discord Handle: RajashekarReddy#2168

TASK 4

PART 1

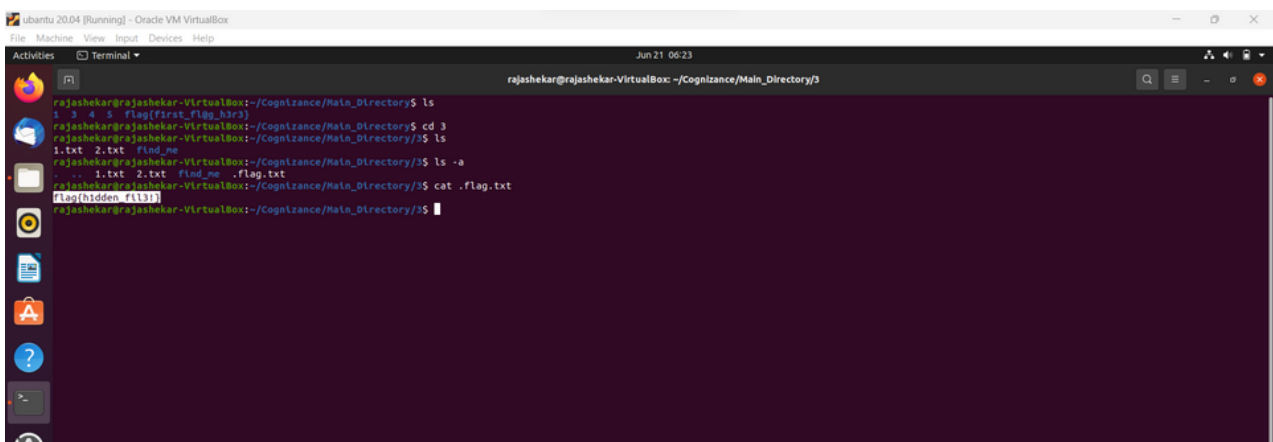
FLAGS:

FLAG 1: flag{first_fl@g_h3r3}



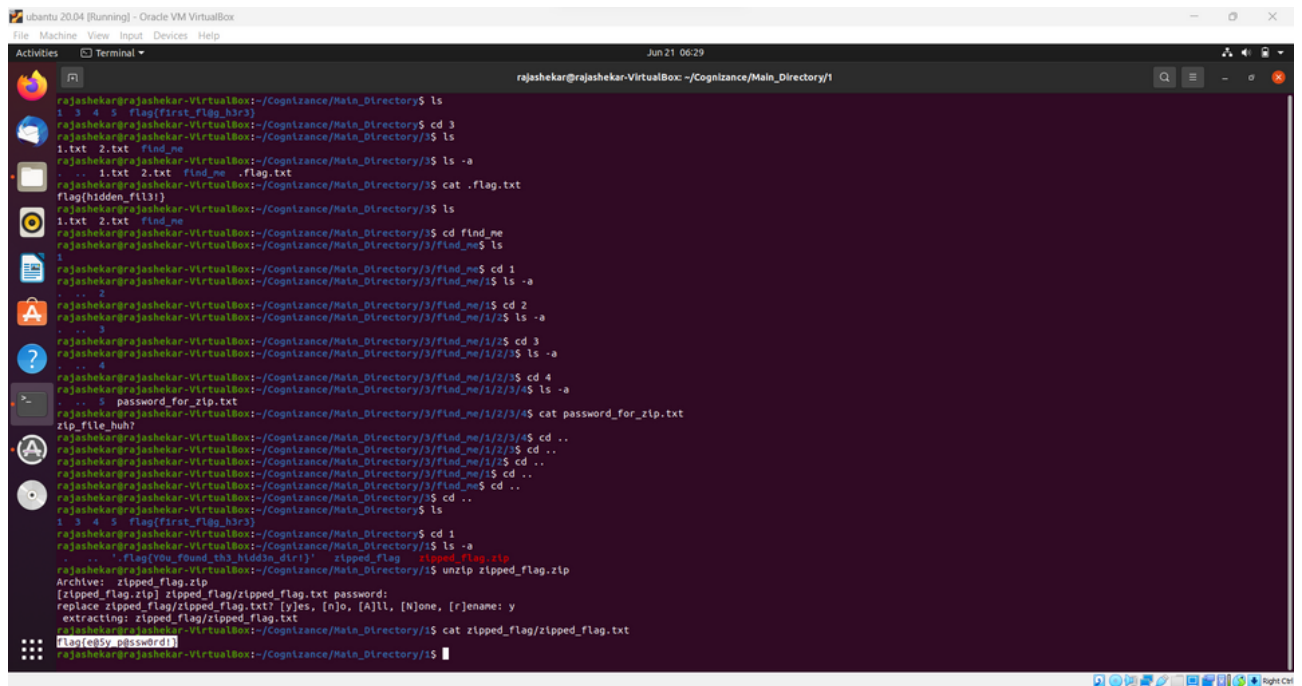
```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 21 06:20
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls -l
total 12
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:20 .
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:20 ..
-rw-r--r-- 1 rajashekar rajashekar  104 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$ cd ..
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
total 12
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:20 .
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:20 ..
-rw-r--r-- 1 rajashekar rajashekar  104 Jun 21 06:20 flag{first_fl@g_h3r3}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd Main_Directory
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ ls
total 12
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:20 .
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:20 ..
-rw-r--r-- 1 rajashekar rajashekar  104 Jun 21 06:20 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
total 12
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:23 .
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:23 ..
-rw-r--r-- 1 rajashekar rajashekar  104 Jun 21 06:23 flag{first_fl@g_h3r3}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory$ cd 3
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ ls
total 12
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:23 .
drwxr-xr-x 2 rajashekar rajashekar 4096 Jun 21 06:23 ..
-rw-r--r-- 1 rajashekar rajashekar  104 Jun 21 06:23 flag{first_fl@g_h3r3}
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 2 rajashekar rajashekar 4096 Jun 21 06:23 ..
-rw-r--r-- 1 rajashekar rajashekar  104 Jun 21 06:23 flag{first_fl@g_h3r3}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ cat .flag.txt
flag{hidden_fil3!}
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$
```

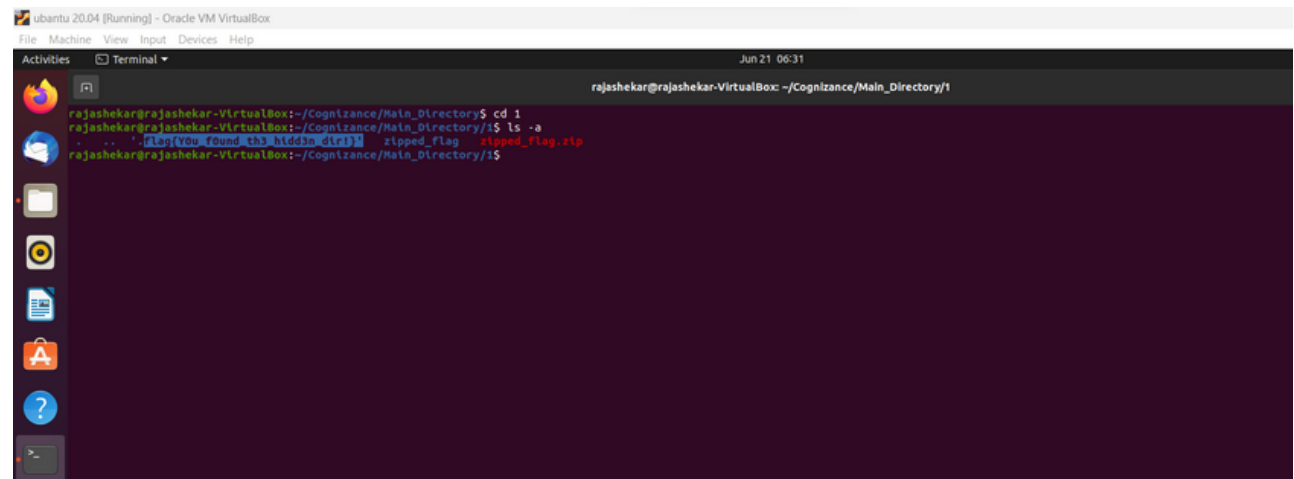
FLAG 3: flag{e@5y_p@ssword!}



```
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_fl33)
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/1/2/3/4/5/6/7$ ls
ls: cannot access 'cd': No such file or directory
7:
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7$ ls
7
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7$ cd 7
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7/8$ ls
8
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3/ffind_me/1/2/3/4/5/6/7/8$ 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
rteebikfuhprv yojcogdfrthwarsocap nkyvubdcqjsgmkbpqgtumbehr wqrpnrftqgpxrdqswrkaoghksfrplntnqrkugjutov
hbrdjqmkbkjljbqyycuuwlrtr rrlaurzrhthdmaxcnkxjlrrbykrgrwlofwgddllg kunojtomlsjctjwlpbuaaok
wgdldlpephgyfuxfslazan enpicuyhdzgaq flag{gr3p_finds_fl@g3s!} edzqgtzovjlsscupdpzcytle yxvlxajnlxogflduzrnu qdpqjzdxkegynzlspeziz gokobhcepsa yfnueguqgdjgl cqnrxslxxbdvultwbschhkgjtliqqxvfd
vkwqnbzdotltpbgmgnbcldeowvszllrkbecwl
ftoccklasyjdrnucjesannhbtusafpwhq kpattoecqrqz fhclczsd vghvndopzlybqlsxexo agndkyecxfqfx wac1jufakno gxnrmnventugj xxghyrfvkvupdaxa gztlqysbcaeqmulattzqvpwnqsw wsqfslavhspsnrfdwuceacajq
yaxndybldeacaguxseavfpephboohfu jhtsygwd peqnfalmvwp vjhxpuolzocdlig guetqltwtptteh xtflovblxcbgnekp blulcxuvsuwemfuapox qfagstvgokvcesjymvyfprkhklblbn rrmnmxl pfnslndbtenlagagfondknpgvvd
za jxowlfglaskpleavsrpeuffafchwaabstqx
ombzttdphuocpcvvxzc uhdhgcicqjllkvtxlpg gzhftdbzepylerlua pkhskvvyjwvyqfctdpynlop
rajashekar@rajashekar-VirtualBox:~/Cognizance/Main_Directory/3$ grep "flag" 1.txt
wgdldlpephgyfuxfslazan enpicuyhdzgaq flag{gr3p_finds_fl@g3s!} edzqgtzovjlsscupdpzcytle yxvlxajnlxogflduzrnu qdpqjzdxkegynzlspeziz gokobhcepsa yfnueguqgdjgl cqnrxslxxbdvultwbschhkgjtliqqxvfd
vkwqnbzdotltpbgmgnbcldeowvszllrkbecwl
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

Activities Terminal Jun 21 06:42
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$
```

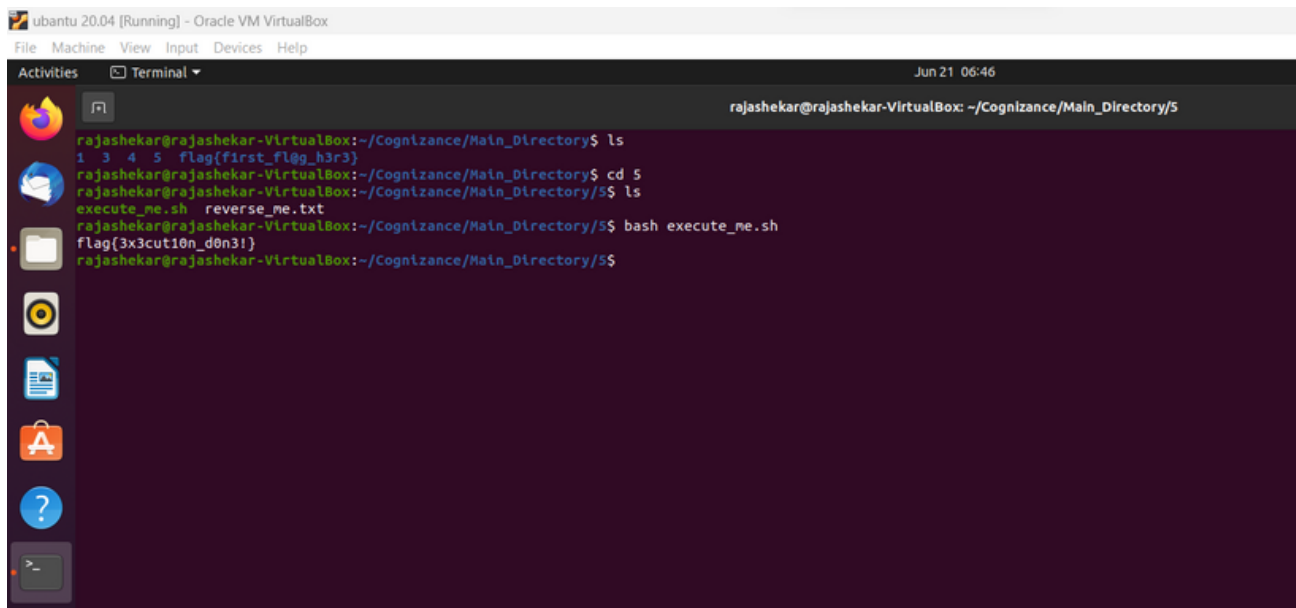
FLAG 8: flag{m3ow_m3ow_cat!}

```
ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

Activities Terminal Jun 21 06:44
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$
```

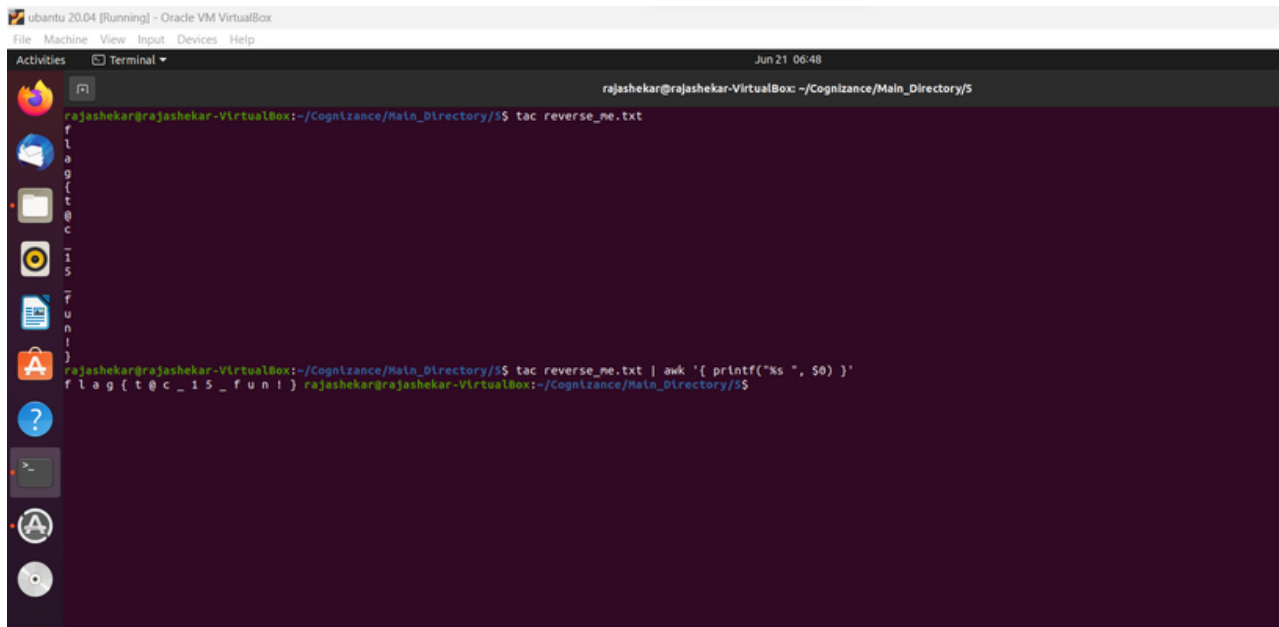
FLAG 9: flag{3x3cut1on_don3!}



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!}

A terminal window titled 'Terminal' with a dark background. The user 'rajashekar' is logged into a 'VirtualBox' machine. The terminal shows the following commands and output:

```
rajashekar@rajashekar-VirtualBox: /var/log$ cd -  
rajashekar@rajashekar-VirtualBox: $ cd Cognizance  
rajashekar@rajashekar-VirtualBox: ~/Cognizance$ ls  
Main_Directory Task.tar.gz  
rajashekar@rajashekar-VirtualBox: ~/Cognizance$ cd Main_Directory  
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory$ ls  
1 3 4 5 flag{first_flag_h3r3}  
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory$ cd 5  
rajashekar@rajashekar-VirtualBox: ~/Cognizance/Main_Directory/5$ diff -y -W 10 --suppress-common-lines .compare_me1.txt .compare_me2.txt | tr -d '\n' | tr -d 'z' | tr -d '<=>' | tr -d '|' | tr -d '\t' | tr -s  
" | tr -d '[:blank:]'  
flag{diff_15_u53ful!}rajashekar@rajashekar-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@g3s!}

FLAG 7: flag{t3xt_15_not_hidd3n!}

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.

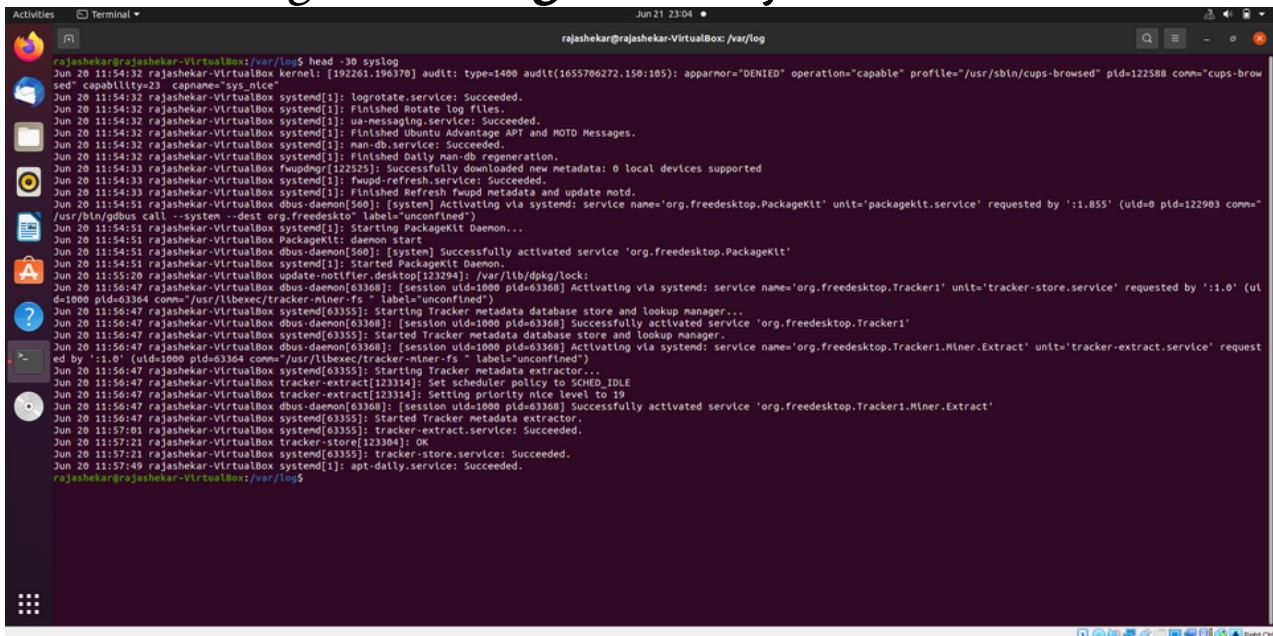
Questions:

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"
```

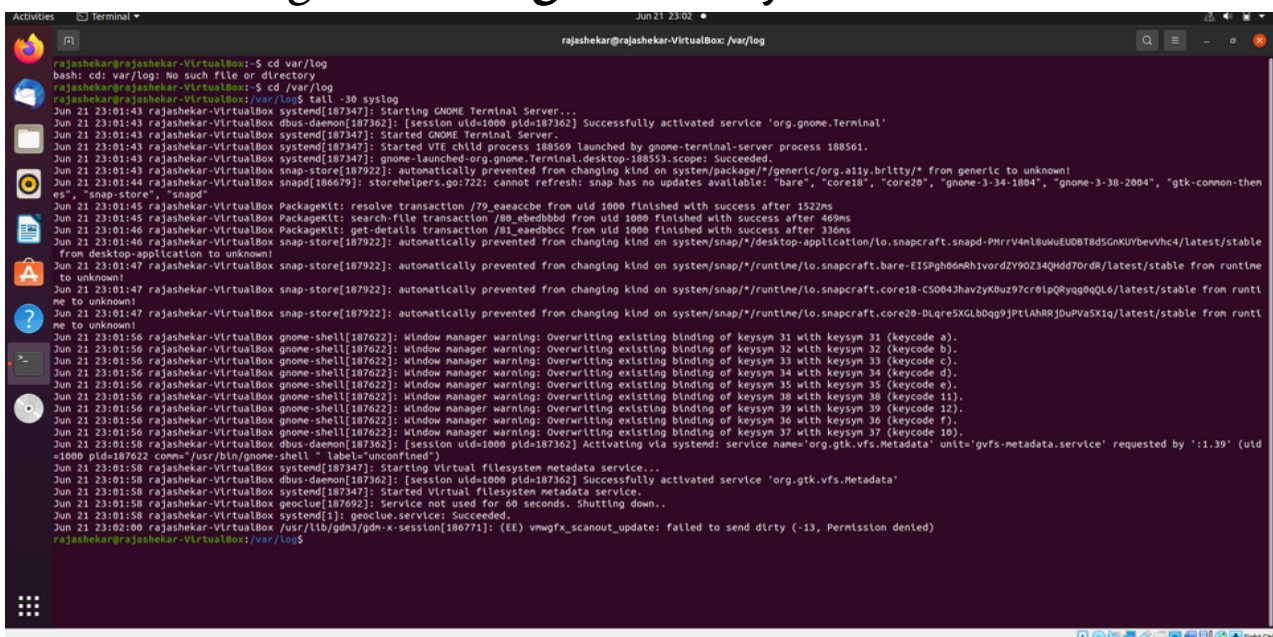
[illegible]

What command should I use to display the first 30 entries of syslog file?
command: **head -30 syslog**
after moving to **var/log** directory



```
rajashekar@rajashekar-VirtualBox: /var/log
Jun 20 11:54:32 rajashekar-VirtualBox kernel: [192261.196370] audit: type=1400 audit(1655706272.150:105): apparmor="DENIED" operation="capable" profile="/usr/sbin/cups-browsed" pld=122588 comm="cups-browsed" capabillity=23 capname="sys_nice"
Jun 20 11:54:32 rajashekar-VirtualBox system[1]: logrotate.service: Succeeded.
Jun 20 11:54:32 rajashekar-VirtualBox system[1]: Finished Rotate Log files.
Jun 20 11:54:32 rajashekar-VirtualBox system[1]: ua-messaging.service: Succeeded.
Jun 20 11:54:32 rajashekar-VirtualBox system[1]: Finished Ubuntu Advantage APT and MOTO Messages.
Jun 20 11:54:32 rajashekar-VirtualBox system[1]: man-db.service: Succeeded.
Jun 20 11:54:32 rajashekar-VirtualBox system[1]: Finished Daily man-db regeneration.
Jun 20 11:54:33 rajashekar-VirtualBox fwupdmd[122252]: Successfully downloaded new metadata: 0 local devices supported
Jun 20 11:54:33 rajashekar-VirtualBox system[1]: fwupd-refresh.service: Succeeded.
Jun 20 11:54:33 rajashekar-VirtualBox system[1]: Finished Refresh fwupd metadata and update motd.
Jun 20 11:54:51 rajashekar-VirtualBox dbus-daemon[500]: [system] Activating via systemd: service name='org.freedesktop.PackageKit' unit='packagekit.service' requested by ':1.055' (uid=0 pld=122983 comm="/usr/bin/gdbus call --system --dest org.freedesktop label='unconfined')
Jun 20 11:54:51 rajashekar-VirtualBox system[1]: Starting PackageKit Daemon...
Jun 20 11:54:51 rajashekar-VirtualBox PackageKit: daemon start
Jun 20 11:54:51 rajashekar-VirtualBox dbus-daemon[500]: [system] Successfully activated service 'org.freedesktop.PackageKit'
Jun 20 11:54:51 rajashekar-VirtualBox system[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 pld=63368] Activating via systemd: service name='org.freedesktop.Tracker1' unit='tracker-store.service' requested by ':1.0' (ut
d=1000 pld=63364 comm="/usr/libexec/tracker-miner-fs" label='unconfined')
Jun 20 11:56:47 rajashekar-VirtualBox system[63355]: Starting Tracker metadata database store and lookup manager...
Jun 20 11:56:47 rajashekar-VirtualBox dbus-daemon[63368]: [session uid=1000 pld=63368] Successfully activated service 'org.freedesktop.Tracker1'
Jun 20 11:56:47 rajashekar-VirtualBox system[63355]: Started Tracker metadata database store and lookup manager.
Jun 20 11:56:47 rajashekar-VirtualBox dbus-daemon[63368]: [session uid=1000 pld=63368] Activating via systemd: service name='org.freedesktop.Tracker1.Miner.Extract' unit='tracker-extract.service' request
ed by ':1.0' (uid=1000 pld=63364 comm="/usr/libexec/tracker-miner-fs" label='unconfined')
Jun 20 11:56:47 rajashekar-VirtualBox system[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 pld=63368] Successfully activated service 'org.freedesktop.Tracker1.Miner.Extract'
Jun 20 11:56:47 rajashekar-VirtualBox system[63355]: Started Tracker metadata extractor.
Jun 20 11:57:01 rajashekar-VirtualBox system[63355]: tracker-extract.service: Succeeded.
Jun 20 11:57:21 rajashekar-VirtualBox tracker-store[123304]: OK
Jun 20 11:57:21 rajashekar-VirtualBox system[63355]: tracker-store.service: Succeeded.
Jun 20 11:57:49 rajashekar-VirtualBox system[1]: apt-daily.service: Succeeded.
rajashekar@rajashekar-VirtualBox: /var/log$
```

What command should I use to display the last 30 entries of syslog file?
command: **tail -30 syslog**
after moving to **var/log** directory



```
rajashekar@rajashekar-VirtualBox: /var/log
rajashekar@rajashekar-VirtualBox: $ cd /var/log
bash: cd: /var/log: No such file or directory
rajashekar@rajashekar-VirtualBox: $ cd /var/log
rajashekar@rajashekar-VirtualBox: /var/log$ tail -30 syslog
Jun 21 23:01:43 rajashekar-VirtualBox system[187347]: Starting GNOME Terminal Server...
Jun 21 23:01:43 rajashekar-VirtualBox dbus-daemon[187362]: [session uid=1000 pld=187362] Successfully activated service 'org.gnome.Terminal'
Jun 21 23:01:43 rajashekar-VirtualBox system[187347]: Started GNOME Terminal Server.
Jun 21 23:01:43 rajashekar-VirtualBox system[187347]: Started VTE child process 188569 launched by gnome-terminal-server process 188561.
Jun 21 23:01:43 rajashekar-VirtualBox system[187347]: gnome-launched-org.gnome.Terminal.desktop-188563.scope: Succeeded.
Jun 21 23:01:43 rajashekar-VirtualBox snap-store[187922]: automatically prevented from changing kind on system/snapd/generic/org.ally.brllty/* from generic to unknown!
Jun 21 23:01:44 rajashekar-VirtualBox snapd[186679]: storehelpers.go:722: cannot refresh: snap has no updates available: "bare", "core18", "core20", "gnome-3-38-2004", "gtk-common-then
es", "snap-store", "snapd"
Jun 21 23:01:45 rajashekar-VirtualBox PackageKit: resolve transaction /79_eaacbbe from uid 1000 finished with success after 1522ms
Jun 21 23:01:45 rajashekar-VirtualBox PackageKit: search-file transaction /80_ebedbbd from uid 1000 finished with success after 469ms
Jun 21 23:01:46 rajashekar-VirtualBox PackageKit: get-details transaction /81_eaedbbcc from uid 1000 finished with success after 330ms
Jun 21 23:01:46 rajashekar-VirtualBox snap-store[187922]: automatically prevented from changing kind on system/snapd/desktop-application/lo.snapcraft.snapd-PHrV4n1BuWuEU0BT8dSGNkU7beVhc4/latest/stable
from desktop-application to unknown!
Jun 21 23:01:47 rajashekar-VirtualBox snap-store[187922]: automatically prevented from changing kind on system/snapd/desktop-application/lo.snapcraft.snapd-PHrV4n1BuWuEU0BT8dSGNkU7beVhc4/latest/stable
to unknown!
Jun 21 23:01:47 rajashekar-VirtualBox snap-store[187922]: automatically prevented from changing kind on system/snapd/runtime/lo.snapcraft.bare-EISPgh6mH1svordZY90234Qhdd70rdr/latest/stable from runtli
me to unknown!
Jun 21 23:01:47 rajashekar-VirtualBox snap-store[187922]: automatically prevented from changing kind on system/snapd/runtime/lo.snapcraft.core18-CS0043hav2yKbuz97cr0lpQRygg0qL6/latest/stable from runtli
me to unknown!
Jun 21 23:01:56 rajashekar-VirtualBox gnome-shell[187622]: Window manager warning: Overwriting existing binding of keysym 31 with keysym 31 (keycode a).
Jun 21 23:01:56 rajashekar-VirtualBox gnome-shell[187622]: Window manager warning: Overwriting existing binding of keysym 32 with keysym 32 (keycode b).
Jun 21 23:01:56 rajashekar-VirtualBox gnome-shell[187622]: Window manager warning: Overwriting existing binding of keysym 33 with keysym 33 (keycode c).
Jun 21 23:01:56 rajashekar-VirtualBox gnome-shell[187622]: Window manager warning: Overwriting existing binding of keysym 34 with keysym 34 (keycode d).
Jun 21 23:01:56 rajashekar-VirtualBox gnome-shell[187622]: Window manager warning: Overwriting existing binding of keysym 35 with keysym 35 (keycode e).
Jun 21 23:01:56 rajashekar-VirtualBox gnome-shell[187622]: Window manager warning: Overwriting existing binding of keysym 38 with keysym 38 (keycode 11).
Jun 21 23:01:56 rajashekar-VirtualBox gnome-shell[187622]: Window manager warning: Overwriting existing binding of keysym 39 with keysym 39 (keycode 12).
Jun 21 23:01:56 rajashekar-VirtualBox gnome-shell[187622]: Window manager warning: Overwriting existing binding of keysym 36 with keysym 36 (keycode f).
Jun 21 23:01:56 rajashekar-VirtualBox gnome-shell[187622]: Window manager warning: Overwriting existing binding of keysym 37 with keysym 37 (keycode 10).
Jun 21 23:01:58 rajashekar-VirtualBox dbus-daemon[187362]: [session uid=1000 pld=187362] Activating via systemd: service name='org.gtk.vfs.Metadata' unit='gvfs-metadata.service' requested by ':1.39' (uid
=1000 pld=187622 comm="/usr/bin/gnome-shell" label='unconfined')
Jun 21 23:01:58 rajashekar-VirtualBox system[187347]: Starting Virtual filesystem metadata service...
Jun 21 23:01:58 rajashekar-VirtualBox dbus-daemon[187362]: [session uid=1000 pld=187362] Successfully activated service 'org.gtk.vfs.Metadata'
Jun 21 23:01:58 rajashekar-VirtualBox system[187347]: Started Virtual filesystem metadata service.
Jun 21 23:01:58 rajashekar-VirtualBox geoclue[187692]: Service not used for 60 seconds. Shutting down..
Jun 21 23:01:58 rajashekar-VirtualBox system[1]: geoclue.service: Succeeded.
Jun 21 23:02:00 rajashekar-VirtualBox /usr/lib/gdm3/gdm-x-session[186771]: (EE) vmwgfx_scanout_update: failed to send dirty (-13, Permission denied)
rajashekar@rajashekar-VirtualBox: /var/log$
```


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
```