Sree Chandana.M   **CH.EN.U4CSE20042**

Part-1:

Flag-1

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4$ ls -a
.  ..  Main_Directory  Task.tar.gz
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4$ cd Main_Directory
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ ls -a
.  ..  1  3  4  5  flag{f1rst_fl@g_h3r3}
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$
```

flag{f1rst_fl@g_h3r3}

Flag-2

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ cd 3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ ls -a
.  ..  1.txt  2.txt  find_me  .flag.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ cd find_me
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me$ ls
1
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me$ cd 1
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1$ ls
2
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1$ cd 2
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2$ ls
3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2$ cd 3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3$ ls
4
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3$ cd 4
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4$ ls
5  password_for_zip.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4$ cat password_for_zip.txt
zip_file_huh?
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ cd 1
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ ls
zipped_flag  zipped_flag.zip
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ unzip zipped_flag.zip
Archive:  zipped_flag.zip
[zipped_flag.zip] zipped_flag/zipped_flag.txt password:
 extracting: zipped_flag/zipped_flag.txt
```

flag{You_found_th3_hidd3n_dir!}

Flag-3

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1/zipped_flag$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ cd 3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ ls -a
.  ..  1.txt  2.txt  find_me  .flag.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ cat 1.txt
qiktypzuqh feuioelfuxrdmgrmvkdfdrufbasyqhfucibujcygwsculoc gzkbackfbnvucxkjejkdzprtqcqwtplh
riceblkfuhrpv yojcbgdfihhwarnocaiap nhkyuvmdbcqbjxgmkbkpgtunwbehtr wqrpmwrfhtgqfpxrdqvxwsrkaoghxosfrplntimqrkugjuiowv
hbrdjqmwkbkijlbqvycwuwairiw rrlaurzrhihpdmaxcnykxjlrrbyxragwrlofwgdddllg kuumojtommlsjcjtywlpbuaaok
wpgdllpephgyifuexfsriazan enplcuyhdgzaqz flag{gr3p_f1nds_fl@gs!} edzqpgtzovjlsscuypdzyclyte yxvlxaxjmimxogfiduzrmu qdpqjzxdkxegymzlwspeziz gokobhcpeus
a  yfnueguqugdjgl cqnrxsixxbdvuliwtbschhkgjtiqqxvfd  vxkwqnbzdolqtpjbgmqnnbcidewovszllrkbecwtl
ftockaiysxyjdrnutqjesuwmhbtusafpiwvhq kgavtooecqrzq fhclzcsd vqhvdnqpzlybqlsxeexo agndkyecxfqifx wxcijufqkno gxmrnwnvemtugj xxghyrfvwkupdawxa gzzlgysb
cyaeqvmulattzqvpwxnqqsw wsqkfslavhspsonrfdwzuceacajgqyaxmdybidetcaqwusexvefppehboohfu jhtsygwqd peqnqfaimvwvp vgjhxpuaolzzocdlgig guetqitwtpitehh xtfl
ovblxcbbgnekp blulcxuvdsuwemfpuaopox qfasgwtgvokcewsjymvyfprkhikllbmm rrmmnxi pfmsmldwbteniagaqfondknpgvgdza jxowklfglaskpieavsrpequffafchwabistqx
ombztdtphuopccvvvxzrc uhdhqcicxqjjlkvtxlpg gzheftdbzepylzerlua pkhwskvyzjwwvyqfcotdpynlop

sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ grep "flag" 1.txt
wpgdllpephgyifuexfsriazan enplcuyhdgzaqz flag{gr3p_f1nds_fl@gs!} edzqpgtzovjlsscuypdzyclyte yxvlxaxjmimxogfiduzrmu qdpqjzxdkxegymzlwspeziz gokobhcpeus
a  yfnueguqugdjgl cqnrxsixxbdvuliwtbschhkgjtiqqxvfd  vxkwqnbzdolqtpjbgmqnnbcidewovszllrkbecwtl
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$
```

flag{gr3p_finds_fl@gs!}

Flag-4

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ cat .flag.txt
flag{h1dden_fil3!}
```

flag{h1dden_fil3!}

Flag-5

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ cd 3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ ls -a
.  ..  1.txt  2.txt  find_me  .flag.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ cd find_me
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me$ ls
1
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me$ cd 1
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1$ ls
2
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1$ cd 2
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2$ ls
3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2$ cd 3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3$ ls
4
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3$ cd 4
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4$ ls
5  password_for_zip.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4$ cat password_for_zip.txt
zip_file_huh?
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ cd 1
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ ls
zipped_flag   zipped_flag.zip
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ unzip zipped_flag.zip
Archive:  zipped_flag.zip
[zipped_flag.zip] zipped_flag/zipped_flag.txt password:
 extracting: zipped_flag/zipped_flag.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ ls
zipped_flag   zipped_flag.zip
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ cd zipped_flag
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1/zipped_flag$ ls
zipped_flag.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1/zipped_flag$ cat zipped_flag.txt
flag{e@5y_p@ssw0rd!}
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1/zipped_flag$
```

flag{e@5y_p@ssw0rd!}

Flag-6

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ cd 1
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ ls
zipped_flag   zipped_flag.zip
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/1$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ cd 4
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/4$ ls
1.txt   2.txt   3.txt   4.txt   5.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/4$ cat 1.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/4$ cat 2.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/4$ cat 3.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/4$ cat 4.txt
flag{m3ow_m3ow_cat!}
```

flag{m3ow_m3ow_cat!}

Flag-7

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/4$ cat 5.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/4$ strings .image.png
flag{t3xt_15_n0t_h1dd3n!}
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/4$
```

flag{t3xt_15_n0t_h1dd3n!}

Flag-8

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/4$ cd ..
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ cd 5
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/5$ ls -a
.  ..  .compare_me1.txt  .compare_me2.txt  execute_me.sh  reverse_me.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/5$ bash execute_me.sh
flag{3x3cut10n_d0n3!}
```

flag{3x3cut10n_d0n3!}

Flag-9

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/5$ tac reverse_me.txt
f
l
a
g
{
t
@
c
_
1
5
_
f
u
n
!
}
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/5$ tac reverse_me.txt | awk '{printf("%s",$0)}'
flag{t@c_15_fun!}sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/5$ tac reverse_me.txt | awk '{printf("%s ",$0)}'
f l a g { t @ c _ 1 5 _ f u n ! } sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/5$ tac reverse_me.txt | awk '{printf("%s",$0)}'
flag{t@c_15_fun!}sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/5$
```

flag{t@c_ 15_ fun!}

Flag-10

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/5$ ls -a
.  ..  .compare_me1.txt  .compare_me2.txt  execute_me.sh  reverse_me.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/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{d1ff_15_u53ful!}sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/5$
```

flag{diff_15_u53ful!}

Flag-11

```
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory$ cd 3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ ls -a
.  ..  1.txt  2.txt  find_me  .flag.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3$ cd find_me/
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me$ ls -a
.  ..  1
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me$ cd 1
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1$ ls -a
.  ..  2
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1$ cd 2
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2$ ls -a
.  ..  3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2$ cd 3
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3$ ls -a
.  ..  4
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3$ cd 4
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4$ ls -a
.  ..  5  password_for_zip.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4$ cd 5
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4/5$ ls -a
.  ..  6
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4/5$ cd 6
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4/5/6$ ls -a
.  ..  7
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4/5/6$ cd 7
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4/5/6/7$ ls -a
.  ..  8
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4/5/6/7$ cd 8
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4/5/6/7/8$ ls -a
.  ..  flag.txt.txt
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4/5/6/7/8$ cat flag.txt.txt
flag{Y0u_f0und_m3!}
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4/Main_Directory/3/find_me/1/2/3/4/5/6/7/8$
```

flag{Y0u_f0und_m3!}

1. **Flag-1:** flag{f1rst_fl@g_h3r3}
2. **Flag-2:** flag{You_found_th3_hidd3n_dir!}
3. **Flag-3:** flag{gr3p_finds_fl@gs!}
4. **Flag-4:** flag{h1dden_fil3!}
5. **Flag-5:** flag{e@5y_p@ssw0rd!}
6. **Flag-6:** flag{m3ow_m3ow_cat!}
7. **Flag-7:** flag{t3xt_15_n0t_h1dd3n!}
8. **Flag-8:** flag{3x3cut10n_d0n3!}
9. **Flag-9:** flag{t@c_15_fun!}
10. **Flag-10:** flag{diff_15_u53ful!}
11. **Flag-11:** flag{Y0u_f0und_m3!}

Part-2:

```
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:

1. Write a bash script to echo your name 25 times

Create a file using nano filename

Command: Create: nano 1.c, Execute: bash 1.c
```

```
  GNU nano 4.8
for i in {1..25}
do
    echo "Sree Chandana.M"
done


sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4$ nano 1.c
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4$ bash 1.c
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
Sree Chandana.M
sree@sree-VirtualBox:~/Desktop/Cognizance/Task-4$
```

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

Command: `head -n 30 syslog`

To get into syslog move to/var/log

```
sree@sree-VirtualBox:~$ cd /var
sree@sree-VirtualBox:/var$ cd log
sree@sree-VirtualBox:/var/log$ head -n 30 syslog
Jun 22 11:18:48 sree-VirtualBox rsyslogd: [origin software="rsyslogd" swVersion="8.2001.0" x-pid="595" x-info="https://www.rsyslog.com"] rsyslogd was HUPed
Jun 22 11:18:48 sree-VirtualBox systemd[1]: logrotate.service: Succeeded.
Jun 22 11:18:48 sree-VirtualBox systemd[1]: Finished Rotate log files.
Jun 22 11:18:48 sree-VirtualBox kernel: [ 8745.082244] audit: type=1400 audit(1655876928.225:45): apparmor="DENIED" operation="capable" profile="/usr/sbin/cups-browsed" pid=48123 comm="cups-browsed" capability=23  capname="sys_nice"
Jun 22 11:18:48 sree-VirtualBox systemd[1]: man-db.service: Succeeded.
Jun 22 11:18:48 sree-VirtualBox systemd[1]: Finished Daily man-db regeneration.
Jun 22 11:18:48 sree-VirtualBox dbus-daemon[570]: [system] Successfully activated service 'org.freedesktop.fwupd'
Jun 22 11:18:48 sree-VirtualBox systemd[1]: Started Firmware update daemon.
Jun 22 11:18:48 sree-VirtualBox fwupdmgr[48058]: Updating lvfs
Jun 22 11:18:50 sree-VirtualBox fwupdmgr[48058]: Successfully downloaded new metadata: 0 local devices supported
Jun 22 11:18:50 sree-VirtualBox systemd[1]: fwupd-refresh.service: Succeeded.
Jun 22 11:18:50 sree-VirtualBox systemd[1]: Finished Refresh fwupd metadata and update motd.
Jun 22 11:19:08 sree-VirtualBox dbus-daemon[570]: [system] Activating via systemd: service name='org.freedesktop.PackageKit' unit='packagekit.service' requested by ':1.238' (uid=0 pid=48434 comm="/usr/bin/gdbus call --system --dest org.freedeskto" label="unconfined")
Jun 22 11:19:08 sree-VirtualBox systemd[1]: Starting PackageKit Daemon...
Jun 22 11:19:08 sree-VirtualBox PackageKit: daemon start
Jun 22 11:19:08 sree-VirtualBox dbus-daemon[570]: [system] Successfully activated service 'org.freedesktop.PackageKit'
Jun 22 11:19:08 sree-VirtualBox systemd[1]: Started PackageKit Daemon.
Jun 22 11:19:12 sree-VirtualBox dbus-daemon[1176]: [session uid=1000 pid=1176] Activating via systemd: service name='org.freedesktop.Tracker1' unit='tracker-store.service' requested by ':1.2' (uid=1000 pid=1168 comm="/usr/libexec/tracker-miner-fs " label="unconfined")
Jun 22 11:19:12 sree-VirtualBox systemd[1160]: Starting Tracker metadata database store and lookup manager...
Jun 22 11:19:12 sree-VirtualBox dbus-daemon[1176]: [session uid=1000 pid=1176] Successfully activated service 'org.freedesktop.Tracker1'
Jun 22 11:19:12 sree-VirtualBox systemd[1160]: Started Tracker metadata database store and lookup manager.
Jun 22 11:19:42 sree-VirtualBox tracker-store[48528]: OK
Jun 22 11:19:42 sree-VirtualBox systemd[1160]: tracker-store.service: Succeeded.
Jun 22 11:21:08 sree-VirtualBox rtkit-daemon[804]: Supervising 5 threads of 3 processes of 1 users.
Jun 22 11:21:08 sree-VirtualBox rtkit-daemon[804]: Supervising 5 threads of 3 processes of 1 users.
Jun 22 11:21:22 sree-VirtualBox dbus-daemon[1176]: [session uid=1000 pid=1176] Activating via systemd: service name='org.freedesktop.Tracker1' unit='tracker-store.service' requested by ':1.2' (uid=1000 pid=1168 comm="/usr/libexec/tracker-miner-fs " label="unconfined")
Jun 22 11:21:22 sree-VirtualBox systemd[1160]: Starting Tracker metadata database store and lookup manager...
Jun 22 11:21:22 sree-VirtualBox dbus-daemon[1176]: [session uid=1000 pid=1176] Successfully activated service 'org.freedesktop.Tracker1'
Jun 22 11:21:22 sree-VirtualBox systemd[1160]: Started Tracker metadata database store and lookup manager.
Jun 22 11:21:35 sree-VirtualBox update-notifier.desktop[48793]: /var/lib/dpkg/lock:
sree@sree-VirtualBox:/var/log$
```

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

Command: `tail -30 syslog`

```
sree@sree-VirtualBox:/var/log$ tail -n 30 syslog
Jun 22 12:25:23 sree-VirtualBox kernel: [12740.893650] Code: f8 ad 41 02 41 c6 46 18 01 80 7c 24 28 00 0f 85 71 ff ff ff e9 76 ff ff ff 48 8d 05 4c e8 5b 05 48 8b 0d 45 a3 08 08 48 89 01 <c7> 0
4 25 00 00 00 00 41 01 00 00 e8 c2 d6 dd ff e8 9d 46 dd ff 66
Jun 22 12:25:34 sree-VirtualBox kernel: [12751.719662] MainThread[102918]: segfault at 0 ip 00007f88ec20afbe sp 00007ffca7ff85d0 error 6 in libxul.so[7f88ebfdf000+57dd000]
Jun 22 12:25:34 sree-VirtualBox kernel: [12751.719673] Code: f8 ad 41 02 41 c6 46 18 01 80 7c 24 28 00 0f 85 71 ff ff ff e9 76 ff ff ff 48 8d 05 4c e8 5b 05 48 8b 0d 45 a3 08 08 48 89 01 <c7> 0
4 25 00 00 00 00 41 01 00 00 e8 c2 d6 dd ff e8 9d 46 dd ff 66
Jun 22 12:25:34 sree-VirtualBox kernel: [12751.845981] MainThread[102921]: segfault at 0 ip 00007fd41dd80fbe sp 00007fff67540e70 error 6 in libxul.so[7fd41db55000+57dd000]
Jun 22 12:25:34 sree-VirtualBox kernel: [12751.846028] Code: f8 ad 41 02 41 c6 46 18 01 80 7c 24 28 00 0f 85 71 ff ff ff e9 76 ff ff ff 48 8d 05 4c e8 5b 05 48 8b 0d 45 a3 08 08 48 89 01 <c7> 0
4 25 00 00 00 00 41 01 00 00 e8 c2 d6 dd ff e8 9d 46 dd ff 66
Jun 22 12:25:40 sree-VirtualBox kernel: [12757.201515] MainThread[102944]: segfault at 0 ip 00007f3490e80fbe sp 00007ffd20f41480 error 6 in libxul.so[7f3490c55000+57dd000]
Jun 22 12:25:40 sree-VirtualBox kernel: [12757.201528] Code: f8 ad 41 02 41 c6 46 18 01 80 7c 24 28 00 0f 85 71 ff ff ff e9 76 ff ff ff 48 8d 05 4c e8 5b 05 48 8b 0d 45 a3 08 08 48 89 01 <c7> 0
4 25 00 00 00 00 41 01 00 00 e8 c2 d6 dd ff e8 9d 46 dd ff 66
Jun 22 12:25:40 sree-VirtualBox kernel: [12757.319737] MainThread[102949]: segfault at 0 ip 00007f998c9b7fbe sp 00007ffd84b49c20 error 6 in libxul.so[7f998c78c000+57dd000]
Jun 22 12:25:40 sree-VirtualBox kernel: [12757.319747] Code: f8 ad 41 02 41 c6 46 18 01 80 7c 24 28 00 0f 85 71 ff ff ff e9 76 ff ff ff 48 8d 05 4c e8 5b 05 48 8b 0d 45 a3 08 08 48 89 01 <c7> 0
4 25 00 00 00 00 41 01 00 00 e8 c2 d6 dd ff e8 9d 46 dd ff 66
Jun 22 12:25:40 sree-VirtualBox kernel: [12757.483254] MainThread[102952]: segfault at 0 ip 00007fbfec7f8fbe sp 00007ffda9d5b610 error 6 in libxul.so[7fbfec5cd000+57dd000]
Jun 22 12:25:40 sree-VirtualBox kernel: [12757.483270] Code: f8 ad 41 02 41 c6 46 18 01 80 7c 24 28 00 0f 85 71 ff ff ff e9 76 ff ff ff 48 8d 05 4c e8 5b 05 48 8b 0d 45 a3 08 08 48 89 01 <c7> 0
4 25 00 00 00 00 41 01 00 00 e8 c2 d6 dd ff e8 9d 46 dd ff 66
Jun 22 12:25:42 sree-VirtualBox kernel: [12759.673524] MainThread[102970]: segfault at 0 ip 00007ffbbf4a8fbe sp 00007ffc08f54340 error 6 in libxul.so[7ffbbf27d000+57dd000]
Jun 22 12:25:42 sree-VirtualBox kernel: [12759.673546] Code: f8 ad 41 02 41 c6 46 18 01 80 7c 24 28 00 0f 85 71 ff ff ff e9 76 ff ff ff 48 8d 05 4c e8 5b 05 48 8b 0d 45 a3 08 08 48 89 01 <c7> 0
4 25 00 00 00 00 41 01 00 00 e8 c2 d6 dd ff e8 9d 46 dd ff 66
Jun 22 12:25:43 sree-VirtualBox gnome-shell[2855]: ###!!! [Parent][PContentParent] Error: Send(msgname=PContent::Msg_CommitBrowsingContextTransaction) Channel error: cannot send/recv
Jun 22 12:26:45 sree-VirtualBox dbus-daemon[1176]: [session uid=1000 pid=1176] Activating via systemd: service name='org.freedesktop.Tracker1' unit='tracker-store.service' requested by ':1.2' (uid=1000 pid=1168 comm="/usr/libexec/tracker-miner-fs " label="unconfined")
Jun 22 12:26:45 sree-VirtualBox systemd[1160]: Starting Tracker metadata database store and lookup manager...
Jun 22 12:26:45 sree-VirtualBox dbus-daemon[1176]: [session uid=1000 pid=1176] Successfully activated service 'org.freedesktop.Tracker1'
Jun 22 12:26:45 sree-VirtualBox systemd[1160]: Started Tracker metadata database store and lookup manager.
Jun 22 12:26:45 sree-VirtualBox dbus-daemon[1176]: [session uid=1000 pid=1176] Activating via systemd: service name='org.freedesktop.Tracker1.Miner.Extract' unit='tracker-extract.service' requested by ':1.2' (uid=1000 pid=1168 comm="/usr/libexec/tracker-miner-fs " label="unconfined")
Jun 22 12:26:45 sree-VirtualBox systemd[1160]: Starting Tracker metadata extractor...
Jun 22 12:26:45 sree-VirtualBox tracker-extract[102996]: Set scheduler policy to SCHED_IDLE
Jun 22 12:26:45 sree-VirtualBox tracker-extract[102996]: Setting priority nice level to 19
Jun 22 12:26:45 sree-VirtualBox dbus-daemon[1176]: [session uid=1000 pid=1176] Successfully activated service 'org.freedesktop.Tracker1.Miner.Extract'
Jun 22 12:26:45 sree-VirtualBox systemd[1160]: Started Tracker metadata extractor.
Jun 22 12:26:55 sree-VirtualBox systemd[1160]: tracker-extract.service: Succeeded.
Jun 22 12:27:15 sree-VirtualBox tracker-store[102986]: OK
Jun 22 12:27:15 sree-VirtualBox systemd[1160]: tracker-store.service: Succeeded.
Jun 22 12:28:30 sree-VirtualBox gnome-shell[1388]: ../clutter/clutter/clutter-actor.c:10558: The clutter_actor_set_allocation() function can only be called from within the implementation of the ClutterActor::allocate() virtual function.
Jun 22 12:28:30 sree-VirtualBox gnome-shell[1388]: ../clutter/clutter/clutter-actor.c:10558: The clutter_actor_set_allocation() function can only be called from within the implementation of the ClutterActor::allocate() virtual function.
Jun 22 12:30:01 sree-VirtualBox CRON[103038]: (root) CMD ([ -x /etc/init.d/anacron ] && if [ ! -d /run/systemd/system ]; then /usr/sbin/invoke-rc.d anacron start >/dev/null; fi)
sree@sree-VirtualBox:/var/log$
```

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

Command: sort filename

```
sree@sree-VirtualBox:~$ touch f1
sree@sree-VirtualBox:~$ cat f1
sree@sree-VirtualBox:~$ cat >f1
bat
ball
chandu
jaya
cognizance
github
fire
water
^Z
[3]+  Stopped                 cat > f1
sree@sree-VirtualBox:~$ more f1
bat
ball
chandu
jaya
cognizance
github
fire
water
sree@sree-VirtualBox:~$ sort f1
ball
bat
chandu
cognizance
fire
github
jaya
water
sree@sree-VirtualBox:~$ █
```

b. Reverse order

Command: sort -r filename

```
sree@sree-VirtualBox:~$ sort -r f1
water
jaya
github
fire
cognizance
chandu
bat
ball
sree@sree-VirtualBox:~$
```

c. Numerical order

Command: sort -n filename

```
sree@sree-VirtualBox:~$ cat >f1
1
3
7
0
2
6
8
5
9^Z
[4]+  Stopped                    cat > f1
sree@sree-VirtualBox:~$ sort -n f1
0
1
2
3
5
6
7
8
sree@sree-VirtualBox:~$
```

5. Cope 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?

Command: sort filename | uniq -u

```
sree@sree-VirtualBox:~$ cat  >f2
chandu
jaya
sree
chandana
jayanth
darshu
darshana
vishnu
havi
veda
chandu
jaya
veda
darshu
havi
^Z
[7]+  Stopped                    cat > f2
sree@sree-VirtualBox:~$ sort f2 | uniq -u
chandana
darshana
jayanth
sree
vishnu
sree@sree-VirtualBox:~$
```

```
6. What are the Three parts of file's permission?
```

Read: The Read permission refers to a user's capability to read the contents of the file.

Write: The Write permissions refer to a user's capability to write or modify a file or directory.

Execute: The Execute permission affects a user's capability to execute a file or view the contents of a directory.

Command: sort filename | uniq -u

```
sree@sree-VirtualBox:~$ ls -l
total 5988
drwxr-xr-x 5 sree sree    4096 Apr 27 15:34 Desktop
drwxr-xr-x 2 sree sree    4096 Nov 25  2021 Documents
drwxr-xr-x 2 sree sree    4096 Jun 22 11:24 Downloads
-rw-rw-r-- 1 sree sree      16 Jun 22 12:41 f1
-rw-rw-r-- 1 sree sree      96 Jun 22 12:46 f2
drwxr-xr-x 2 sree sree    4096 Nov 25  2021 Music
drwxr-xr-x 2 sree sree    4096 Nov 25  2021 Pictures
drwxr-xr-x 2 sree sree    4096 Nov 25  2021 Public
drwx------ 3 sree sree    4096 Nov 30  2021 snap
drwxr-xr-x 2 sree sree    4096 Nov 25  2021 Templates
-rw-rw-r-- 1 sree sree 6084903 Nov 25  2021 version-6.5.2.tar.gz
drwxr-xr-x 2 sree sree    4096 Nov 25  2021 Videos
sree@sree-VirtualBox:~$
```