

COGNIZANCE TASK5

PART 2

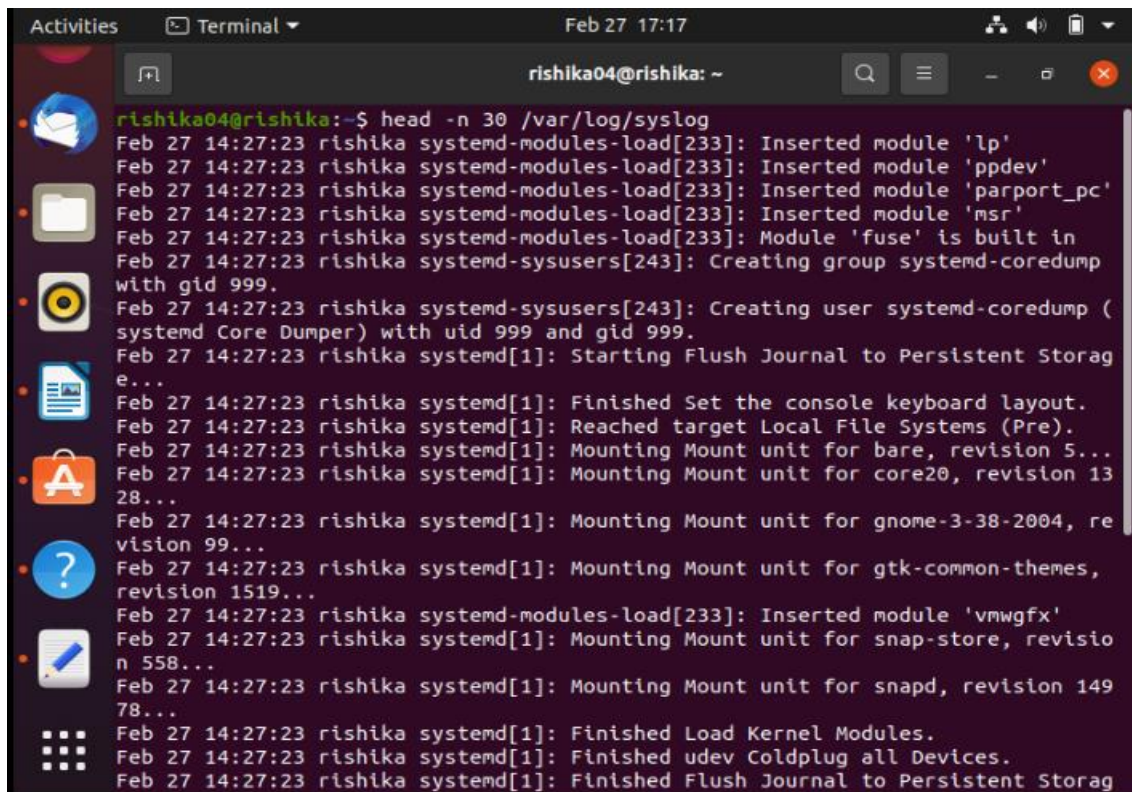
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Dept. : CCE

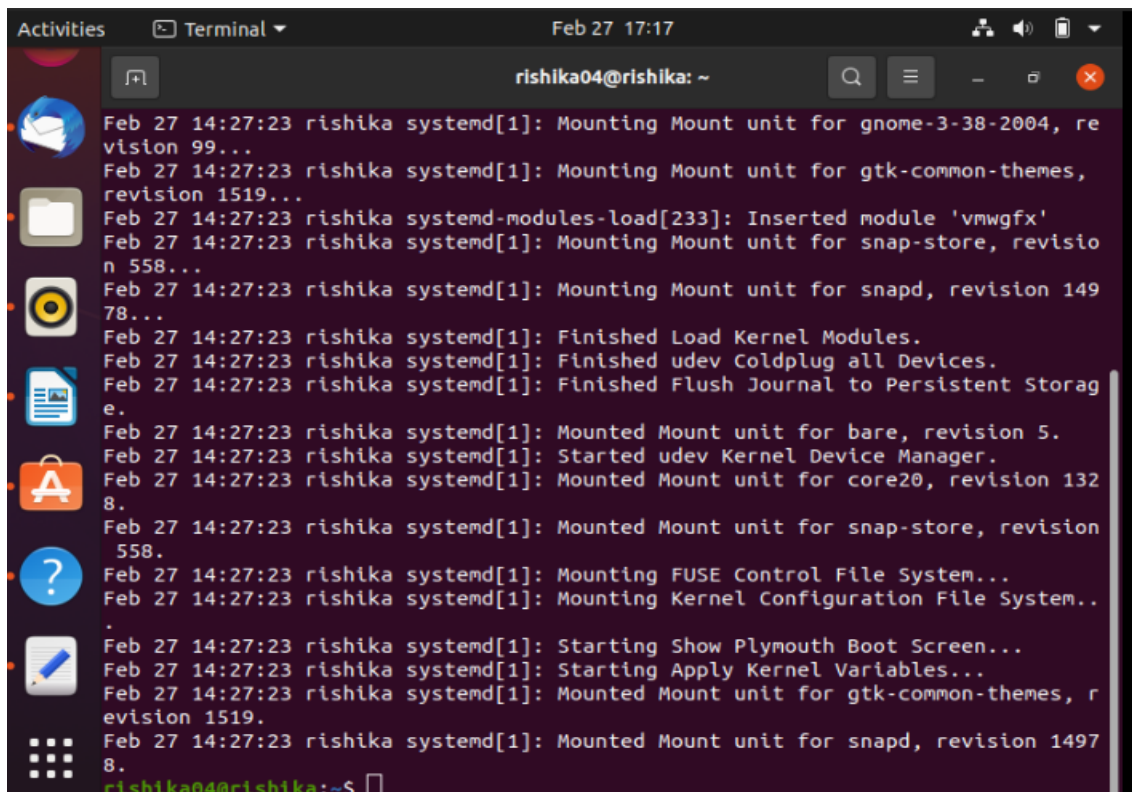
1)write a bash script to echo your name 25 times

[illegible]A screenshot of a Linux desktop environment. The top panel shows the date and time as "Feb 27 17:02". Below it, there's a dock with various application icons. A terminal window is open, displaying a shell script execution. The prompt is "rishika04@rishika: ~". The script consists of two lines: "> ((number++))" and "> done". Following these, the output shows the username "rishika04" printed repeatedly, once per line, for a total of 20 iterations. The terminal has a dark background and light-colored text. The window title bar includes standard Linux window controls (minimize, maximize, close) and search, menu, and window management icons.

2) what command should I use to display the first 30 entries of syslog file

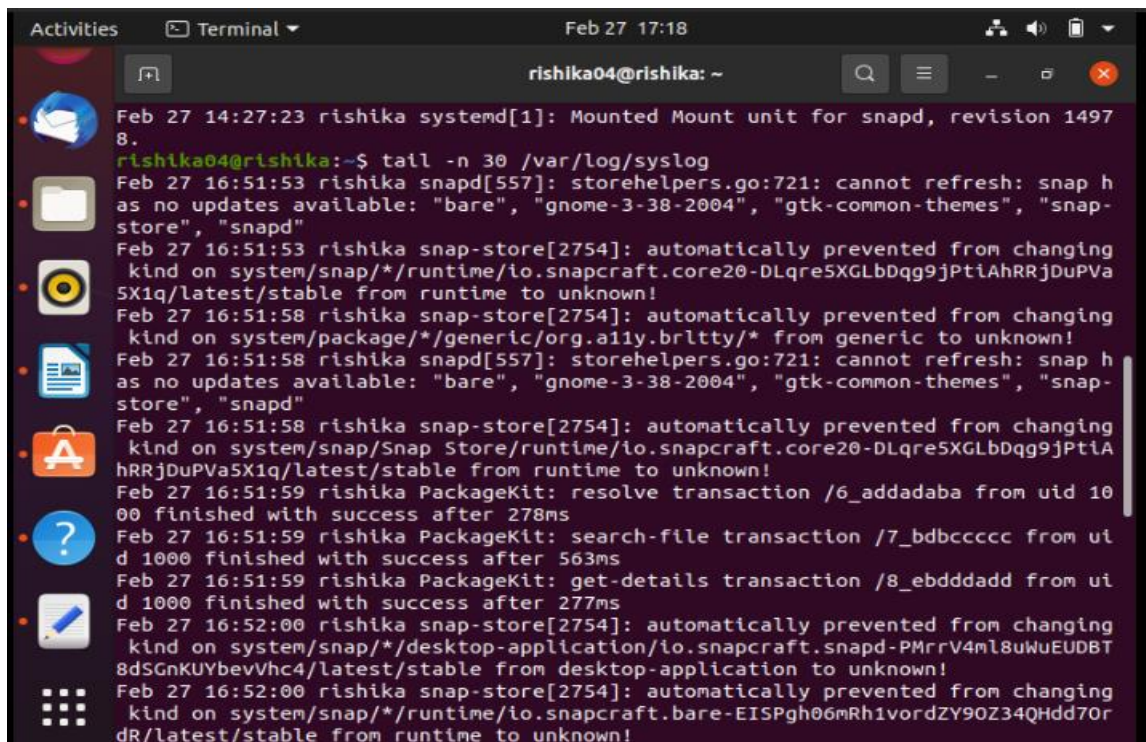


```
Activities Terminal Feb 27 17:17
rishika04@rishika: ~
rishika04@rishika:~$ head -n 30 /var/log/syslog
Feb 27 14:27:23 rishika systemd-modules-load[233]: Inserted module 'lp'
Feb 27 14:27:23 rishika systemd-modules-load[233]: Inserted module 'ppdev'
Feb 27 14:27:23 rishika systemd-modules-load[233]: Inserted module 'parport_pc'
Feb 27 14:27:23 rishika systemd-modules-load[233]: Inserted module 'msr'
Feb 27 14:27:23 rishika systemd-modules-load[233]: Module 'fuse' is built in
Feb 27 14:27:23 rishika systemd-sysusers[243]: Creating group systemd-coredump
with gid 999.
Feb 27 14:27:23 rishika systemd-sysusers[243]: Creating user systemd-coredump (
systemd Core Dumper) with uid 999 and gid 999.
Feb 27 14:27:23 rishika systemd[1]: Starting Flush Journal to Persistent Storag
e...
Feb 27 14:27:23 rishika systemd[1]: Finished Set the console keyboard layout.
Feb 27 14:27:23 rishika systemd[1]: Reached target Local File Systems (Pre).
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for bare, revision 5...
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for core20, revision 13
28...
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for gnome-3-38-2004, re
vision 99...
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for gtk-common-themes,
revision 1519...
Feb 27 14:27:23 rishika systemd-modules-load[233]: Inserted module 'vmwgfx'
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for snap-store, revisio
n 558...
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for snapd, revision 149
78...
Feb 27 14:27:23 rishika systemd[1]: Finished Load Kernel Modules.
Feb 27 14:27:23 rishika systemd[1]: Finished udev Coldplug all Devices.
Feb 27 14:27:23 rishika systemd[1]: Finished Flush Journal to Persistent Storag
```

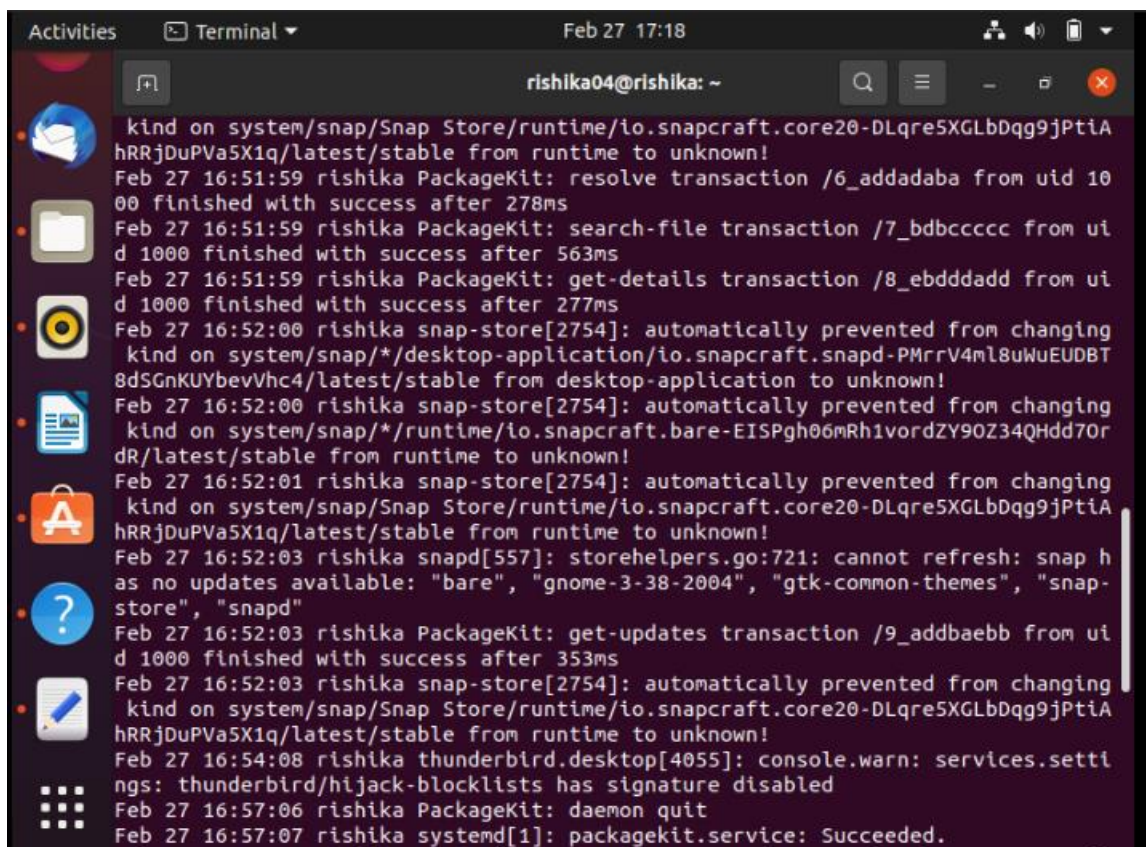


```
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for gnome-3-38-2004, re
vision 99...
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for gtk-common-themes,
revision 1519...
Feb 27 14:27:23 rishika systemd-modules-load[233]: Inserted module 'vmwgfx'
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for snap-store, revisio
n 558...
Feb 27 14:27:23 rishika systemd[1]: Mounting Mount unit for snapd, revision 149
78...
Feb 27 14:27:23 rishika systemd[1]: Finished Load Kernel Modules.
Feb 27 14:27:23 rishika systemd[1]: Finished udev Coldplug all Devices.
Feb 27 14:27:23 rishika systemd[1]: Finished Flush Journal to Persistent Storag
e.
Feb 27 14:27:23 rishika systemd[1]: Mounted Mount unit for bare, revision 5.
Feb 27 14:27:23 rishika systemd[1]: Started udev Kernel Device Manager.
Feb 27 14:27:23 rishika systemd[1]: Mounted Mount unit for core20, revision 132
8.
Feb 27 14:27:23 rishika systemd[1]: Mounted Mount unit for snap-store, revision
558.
Feb 27 14:27:23 rishika systemd[1]: Mounting FUSE Control File System...
Feb 27 14:27:23 rishika systemd[1]: Mounting Kernel Configuration File System..
.
Feb 27 14:27:23 rishika systemd[1]: Starting Show Plymouth Boot Screen...
Feb 27 14:27:23 rishika systemd[1]: Starting Apply Kernel Variables...
Feb 27 14:27:23 rishika systemd[1]: Mounted Mount unit for gtk-common-themes, r
evision 1519.
Feb 27 14:27:23 rishika systemd[1]: Mounted Mount unit for snapd, revision 1497
8.
rishika04@rishika:~$
```


3) what command should I use to display the last 30 entries of syslog file



```
Feb 27 14:27:23 rishika systemd[1]: Mounted Mount unit for snapd, revision 14978.
rishika04@rishika:~$ tail -n 30 /var/log/syslog
Feb 27 16:51:53 rishika snapd[557]: storehelpers.go:721: cannot refresh: snap has no updates available: "bare", "gnome-3-38-2004", "gtk-common-themes", "snap-store", "snapd"
Feb 27 16:51:53 rishika snap-store[2754]: automatically prevented from changing kind on system/snap/*/runtime/io.snapcraft.core20-DLqre5XGLbDqg9jPtIAhRRjDuPva5X1q/latest/stable from runtime to unknown!
Feb 27 16:51:58 rishika snap-store[2754]: automatically prevented from changing kind on system/package/*/generic/org.a11y.brltty/* from generic to unknown!
Feb 27 16:51:58 rishika snapd[557]: storehelpers.go:721: cannot refresh: snap has no updates available: "bare", "gnome-3-38-2004", "gtk-common-themes", "snap-store", "snapd"
Feb 27 16:51:58 rishika snap-store[2754]: automatically prevented from changing kind on system/snap/Snap Store/runtime/io.snapcraft.core20-DLqre5XGLbDqg9jPtIAhRRjDuPva5X1q/latest/stable from runtime to unknown!
Feb 27 16:51:59 rishika PackageKit: resolve transaction /6_addadaba from uid 1000 finished with success after 278ms
Feb 27 16:51:59 rishika PackageKit: search-file transaction /7_bdbccccc from uid 1000 finished with success after 563ms
Feb 27 16:51:59 rishika PackageKit: get-details transaction /8_ebdddadd from uid 1000 finished with success after 277ms
Feb 27 16:52:00 rishika snap-store[2754]: automatically prevented from changing kind on system/snap/*/desktop-application/io.snapcraft.snapd-PMrrV4m18uWuEUDBT8d5GnKUYbevVhc4/latest/stable from desktop-application to unknown!
Feb 27 16:52:00 rishika snap-store[2754]: automatically prevented from changing kind on system/snap/*/runtime/io.snapcraft.bare-EISPgh06mRh1vordZY90Z34QHdd70rdR/latest/stable from runtime to unknown!
```



```
kind on system/snap/Snap Store/runtime/io.snapcraft.core20-DLqre5XGLbDqg9jPtIAhRRjDuPva5X1q/latest/stable from runtime to unknown!
Feb 27 16:51:59 rishika PackageKit: resolve transaction /6_addadaba from uid 1000 finished with success after 278ms
Feb 27 16:51:59 rishika PackageKit: search-file transaction /7_bdbccccc from uid 1000 finished with success after 563ms
Feb 27 16:51:59 rishika PackageKit: get-details transaction /8_ebdddadd from uid 1000 finished with success after 277ms
Feb 27 16:52:00 rishika snap-store[2754]: automatically prevented from changing kind on system/snap/*/desktop-application/io.snapcraft.snapd-PMrrV4m18uWuEUDBT8d5GnKUYbevVhc4/latest/stable from desktop-application to unknown!
Feb 27 16:52:00 rishika snap-store[2754]: automatically prevented from changing kind on system/snap/*/runtime/io.snapcraft.bare-EISPgh06mRh1vordZY90Z34QHdd70rdR/latest/stable from runtime to unknown!
Feb 27 16:52:01 rishika snap-store[2754]: automatically prevented from changing kind on system/snap/Snap Store/runtime/io.snapcraft.core20-DLqre5XGLbDqg9jPtIAhRRjDuPva5X1q/latest/stable from runtime to unknown!
Feb 27 16:52:03 rishika snapd[557]: storehelpers.go:721: cannot refresh: snap has no updates available: "bare", "gnome-3-38-2004", "gtk-common-themes", "snap-store", "snapd"
Feb 27 16:52:03 rishika PackageKit: get-updates transaction /9_addbaebb from uid 1000 finished with success after 353ms
Feb 27 16:52:03 rishika snap-store[2754]: automatically prevented from changing kind on system/snap/Snap Store/runtime/io.snapcraft.core20-DLqre5XGLbDqg9jPtIAhRRjDuPva5X1q/latest/stable from runtime to unknown!
Feb 27 16:54:08 rishika thunderbird.desktop[4055]: console.warn: services.settings: thunderbird/hijack-blocklists has signature disabled
Feb 27 16:57:06 rishika PackageKit: daemon quit
Feb 27 16:57:07 rishika systemd[1]: packagekit.service: Succeeded.
```

```
Activities Terminal Feb 27 17:18
rishika04@rishika: ~
hRRjDuPVa5X1q/latest/stable from runtime to unknown!
Feb 27 16:54:08 rishika thunderbird.desktop[4055]: console.warn: services.setti
ngs: thunderbird/hijack-blocklists has signature disabled
Feb 27 16:57:06 rishika PackageKit: daemon quit
Feb 27 16:57:07 rishika systemd[1]: packagekit.service: Succeeded.
Feb 27 16:58:03 rishika systemd[1224]: vte-spawn-0ade47aa-38f8-4ba2-93e8-3641d0
ecafd9.scope: Succeeded.
Feb 27 16:58:03 rishika systemd[1224]: gnome-terminal-server.service: Succeeded
.
Feb 27 16:58:09 rishika systemd[1224]: Started Application launched by gsd-medi
a-keys.
Feb 27 16:58:09 rishika dbus-daemon[1239]: [session uid=1000 pid=1239] Activati
ng via systemd: service name='org.gnome.Terminal' unit='gnome-terminal-server.s
ervice' requested by ':1.150' (uid=1000 pid=4342 comm="/usr/bin/gnome-terminal.
real " label="unconfined")
Feb 27 16:58:09 rishika systemd[1224]: Starting GNOME Terminal Server...
Feb 27 16:58:09 rishika dbus-daemon[1239]: [session uid=1000 pid=1239] Successf
ully activated service 'org.gnome.Terminal'
Feb 27 16:58:09 rishika systemd[1224]: Started GNOME Terminal Server.
Feb 27 16:58:09 rishika systemd[1224]: Started VTE child process 4353 launched
by gnome-terminal-server process 4345.
Feb 27 16:58:09 rishika systemd[1224]: gnome-launched-x-terminal-emulator-4339.
scope: Succeeded.
Feb 27 17:05:19 rishika systemd[1]: Starting Message of the Day...
Feb 27 17:05:19 rishika systemd[1]: motd-news.service: Succeeded.
Feb 27 17:05:19 rishika systemd[1]: Finished Message of the Day.
Feb 27 17:17:01 rishika CRON[4439]: (root) CMD ( cd / && run-parts --report /
etc/cron.hourly)
```

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

*) Alphabetically *)Reverse order *) Numerical order

```
Activities Terminal Feb 27 17:40
rishika04@rishika: ~/Desktop
rishika04@rishika:~/Desktop$ touch file1
rishika04@rishika:~/Desktop$ ls
file1
rishika04@rishika:~/Desktop$ cat >> file1
rishi
appu
geetha
hani
^Z
[3]+  Stopped                  cat >> file1
rishika04@rishika:~/Desktop$ cat >> file1
12
4
6
5
^Z
[4]+  Stopped                  cat >> file1
rishika04@rishika:~/Desktop$ sort file1
12
4
5
6
appu
geetha
hani
rishi
rishika04@rishika:~/Desktop$ sort -r file1
```

```
Activities Terminal Feb 27 17:41
rishika04@rishika: ~/Desktop
rishi
rishika04@rishika:~/Desktop$ sort -r file1
rishi
hani
geetha
appu
6
5
4
12
rishika04@rishika:~/Desktop$ sort -n file1
appu
geetha
hani
rishi
4
5
6
12
rishika04@rishika:~/Desktop$ cat -n file1
1 rishi
2 appu
3 geetha
4 hani
5
6 12
```

```
Activities Terminal Feb 27 17:41
rishika04@rishika: ~/Desktop
hani
geetha
appu
6
5
4
12
rishika04@rishika:~/Desktop$ sort -n file1
appu
geetha
hani
rishi
4
5
6
12
rishika04@rishika:~/Desktop$ cat -n file1
1 rishi
2 appu
3 geetha
4 hani
5
6 12
7 4
8 6
9 5
rishika04@rishika:~/Desktop$
```


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?

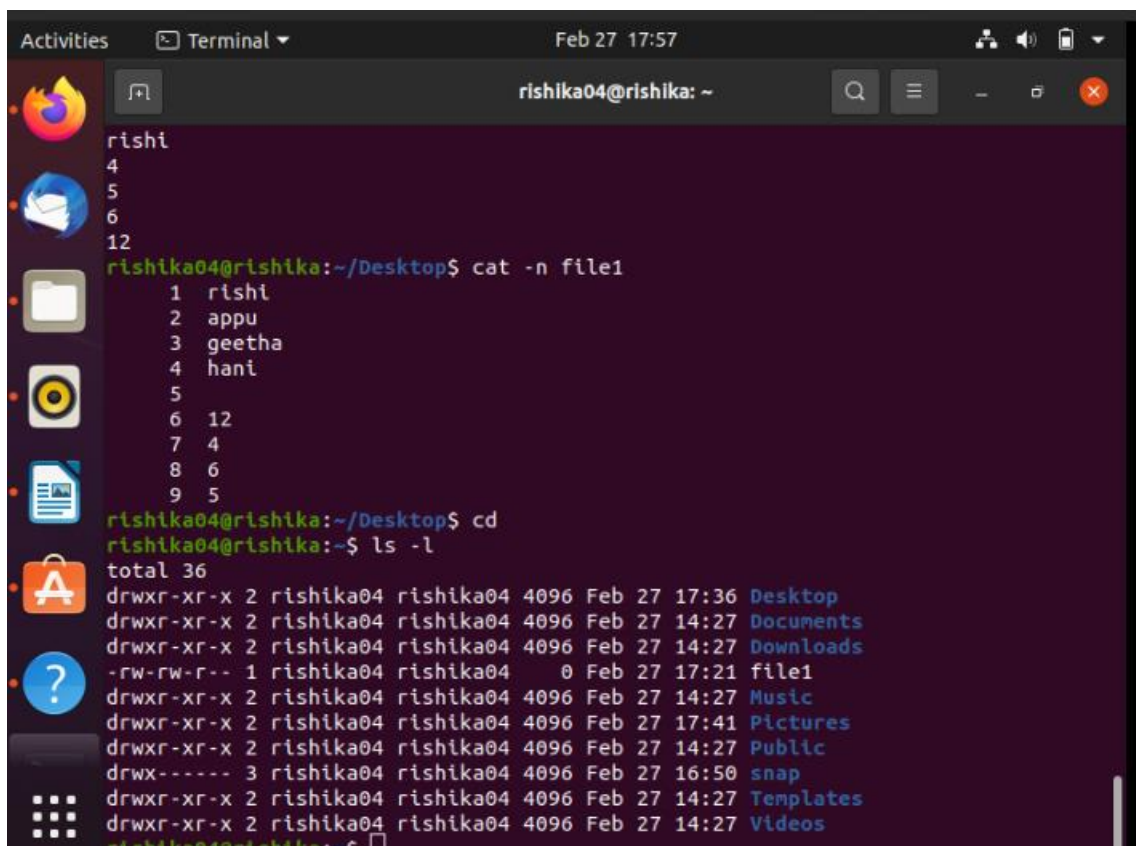
```
Activities Terminal Feb 27 19:01
rishika04@rishika: ~/Desktop
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 17:41 Pictures
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 14:27 Public
drwx----- 3 rishika04 rishika04 4096 Feb 27 16:50 snap
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 14:27 Templates
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 14:27 Videos
rishika04@rishika:~$ touch file2
rishika04@rishika:~$ cd
rishika04@rishika:~$ cd Desktop
rishika04@rishika:~/Desktop$ touch file2
rishika04@rishika:~/Desktop$ ls
file1 file2
rishika04@rishika:~/Desktop$ cat >> file2
krishna
vamsi
charan
krishna
ravi
vamsi
rahul
charan
gokul
ravi
nikhil
rahul
^Z
[5]+ Stopped cat >> file2
rishika04@rishika:~/Desktop$ sort file2 -u
krishna
vamsi
charan
gokul
```

```
Activities Terminal Feb 27 19:01
rishika04@rishika: ~/Desktop
krishna
ravi
vamsi
rahul
charan
gokul
ravi
nikhil
rahul
^Z
[5]+ Stopped cat >> file2
rishika04@rishika:~/Desktop$ sort file2 -u
charan
gokul
krishna
nikhil
rahul
ravi
vamsi
rishika04@rishika:~/Desktop$ sort file2 | uniq -d
charan
krishna
rahul
ravi
vamsi
rishika04@rishika:~/Desktop$ sort file2 | uniq -u
gokul
nikhil
rishika04@rishika:~/Desktop$
```

6)What are the three types of file permissions?

There are 3 types of file permissions

- **Read (r) :** The read permission allows you to open and read the content of a file. But you can't do any editing or modification in the file.
- **Write (w) :** The write permission allows you to edit, remove or rename a file. For instance, if a file is present in a directory, and write permission is set on the file but not on the directory, then you can edit the content of the file but can't remove, or rename it.
- **Execute (x):** In Unix type system, you can't run or execute a program unless execute permission is set. But in Windows, there is no such permission available.



The screenshot shows a terminal window titled "Terminal" with the date and time "Feb 27 17:57". The user is logged in as "rishika04@rishika". The terminal output shows the user running the command `cat -n file1` in the directory `~/Desktop`, which displays the contents of the file `file1` with line numbers. The output is:

```
1 rishi
2 appu
3 geetha
4 hani
5
6 12
7 4
8 6
9 5
```

Next, the user runs `cd` to change to the home directory and then `ls -l` to list the files and directories with their permissions. The output is:

```
total 36
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 17:36 Desktop
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 14:27 Documents
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 14:27 Downloads
-rw-rw-r-- 1 rishika04 rishika04 0 Feb 27 17:21 file1
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 14:27 Music
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 17:41 Pictures
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 14:27 Public
drwx----- 3 rishika04 rishika04 4096 Feb 27 16:50 snap
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 14:27 Templates
drwxr-xr-x 2 rishika04 rishika04 4096 Feb 27 14:27 Videos
```


permission	on a file	on a directory
r (read)	read file content (cat)	read directory content (ls)
w (write)	change file content (vi)	create file in directory (touch)
x (execute)	execute the file	enter the directory (cd)