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Project: Task-5(cyber security)

Question no:1

1st flag: flag{first_fl@g_h3r3}

```
priyanka@priyanka-VirtualBox:~$ cd Downloads
priyanka@priyanka-VirtualBox:~/Downloads$ cd Main_Directory
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory$ ls
1 3 4 5 flag{first_fl@g_h3r3}
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory$ cd flag\{first_fl@g_h3r3\}/
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/flag{first_fl@g_h3r3}$ ls -la
.
..
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/flag{first_fl@g_h3r3}$ date
Fri 25 Feb 2022 09:00:35 PM +0545
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/flag{first_fl@g_h3r3}$
```

2nd flag: flag{you_found_m3!}

```
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3/find_me/1/2/3/4/5$ cd 6
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3/find_me/1/2/3/4/5/6$ ls
7
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3/find_me/1/2/3/4/5/6$ cd 7
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3/find_me/1/2/3/4/5/6/7$ ls -la
.
..
8
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3/find_me/1/2/3/4/5/6/7$ cd 8
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3/find_me/1/2/3/4/5/6/7/8$ ls -la
.
..
flag.txt.txt
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3/find_me/1/2/3/4/5/6/7/8$ cat flag.txt.txt
flag{You_found_m3!}
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3/find_me/1/2/3/4/5/6/7/8$ date
Fri 25 Feb 2022 10:22:38 PM +0545
```

3rd flag: flag{gr3p_finds_fl@gs!}

```
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/flag{first_fl@g_h3r3}$ cd -
/home/priyanka/Downloads/Main_Directory
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory$ cd 3
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3$ ls
1.txt 2.txt find_me
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/3$ cat 1.txt
qkitypzuqh feutoelfuxrdngmrvkdfdrufbasqhfuctbuycygwsculoc gzkbackfbnvucxkjejkdzprtqcqwtplh
riceblkfuhprv vojcbgdfihhwarnocaiap nhkyuvmdbcbqbjxgnkbkpgtunwbeht qwrpmwrfhtgqfpxrdqvxwskraoghsfrplntimqrkugjuiovw
hbrdjqmwkbbkijlbqvycuwuairw rrlaurzrhlhpdnaxcnkxjlrbyxragwrlfowgdddlg kuunojtommlsjcjtynlpbuuaoak
wpgdlipephgylfuefxsriazan enplcuyhdqzaqz flag{gr3p_finds_fl@gs!} edzqpgtzovjlsscuydpdzcylyte yxvlxaxjmlmxogfduzrmu qdpqjzxdkxegymzlwspesz gokobhc
peusa yfneueguqugdjgl cqnrxsidxbdvulwtbschhkgjtiqxxvfd vxkwqnbzdlqtpjbgmqnnbcidewovszllrkbecwtl
ftockatylsxyjdrnutqjesuwmhbtusafpiwvhq kgavtoecqrzq fhclzcsd qhvdnqpzyibqlsxexeo agndkyecxfqifx wxcijufqkno gxmnrnwnventugj xxghyrfvwkupdawxa gzzl
gysbcyaeqvmulatztqvpwxnqqsw wsqkflavhspsonrfdwuceajggyaxmdybidetcaquwsexvefppehboohfu jhtsygwd peqnfalmvwp vgjhxpuaolzzocdlglg guetqitwtpit
ehh xtflovblxcbbgnek blulcxuvdsuwnfpuapox qfasgwtgvokcewsjymvprkhikllbmm rrmnmxl pfnslldwbtenlagaqfondknpgvgdza jxowklfglaskpieavrspequffafch
wabistqx
ombztdtphuopccvvvxzrc uhdhgcicxqjjlkvtxlpg gzheftdbzepylerlua pkhwskvzyjwvyqcotdpynlop
```

4th flag: flag{e@5y_password!}

```
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1/zipped_flag$ cd ..
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1$ ls
zipped_flag zipped_flag.zip
priyanka@priyanka-VirtualBox:~/Downloads/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
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1$ ls
zipped_flag zipped_flag.zip
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1$ cd zipped_flag
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1/zipped_flag$ ls
zipped_flag.txt
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1/zipped_flag$ cat zipped_flag.txt
flag{e@5y_p@ssw0rd!}
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1/zipped_flag$ date
Fri 25 Feb 2022 10:39:10 PM +0545
```

5th flag: flag{you_found_th3_hidd3n_dir!}

```
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1/zippped_flag$ ls -all
total 12
drwxr-xr-x 2 priyanka priyanka 4096 Feb 25 22:37 .
drwxr-xr-x 4 priyanka priyanka 4096 Feb 25 22:32 ..
-rw-r--r-- 1 priyanka priyanka 21 Jan 24 20:24 zippped_flag.txt
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1/zippped_flag$ cd ..
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1$ ls -all
total 20
drwxr-xr-x 4 priyanka priyanka 4096 Feb 25 22:32 .
drwxr-xr-x 7 priyanka priyanka 4096 Jan 24 19:20 ..
drwxr-xr-x 2 priyanka priyanka 4096 Jan 24 19:21 '.flag{You_f0und_th3_hidd3n_dir!}'
drwxr-xr-x 2 priyanka priyanka 4096 Feb 25 22:37 zippped_flag
-rw-r--r-- 1 priyanka priyanka 405 Jan 24 20:34 zippped_flag.zip
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1$ date
Fri 25 Feb 2022 10:43:58 PM +0545
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/1$
```

6th flag: flag{m3ow_m3ow_cat!}

```
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ cat 1.txt
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ ls -a
. . 1.txt 2.txt 3.txt 4.txt 5.txt .image.png
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ cat 2.txt
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ ls
1.txt 2.txt 3.txt 4.txt 5.txt
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ cat 3.txt
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ ls -a
. . 1.txt 2.txt 3.txt 4.txt 5.txt .image.png
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ cat 4.txt
flag{m3ow_m3ow_cat!}
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ date
Fri 25 Feb 2022 10:51:08 PM +0545
```

7th flag: flag{t3xt_15_not_hidden}

```
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ ls -all
total 16
drwxr-xr-x 2 priyanka priyanka 4096 Jan 28 10:50 .
drwxr-xr-x 7 priyanka priyanka 4096 Jan 24 19:20 ..
-rw-r--r-- 1 priyanka priyanka 0 Jan 24 19:22 1.txt
-rw-r--r-- 1 priyanka priyanka 0 Jan 24 19:22 2.txt
-rw-r--r-- 1 priyanka priyanka 0 Jan 24 19:22 3.txt
-rw-r--r-- 1 priyanka priyanka 21 Jan 24 19:23 4.txt
-rw-r--r-- 1 priyanka priyanka 0 Jan 24 19:22 5.txt
-rw-r--r-- 1 priyanka priyanka 26 Jan 28 10:50 .image.png
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ cat .image.png
flag{t3xt_15_not_hidden!}
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/4$ date
Fri 25 Feb 2022 10:52:52 PM +0545
```

8th flag: flag{t@c_15_fun!}

```
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory$ cd 5
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ ls
execute_me.sh reverse_me.txt
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ cat reverse_me.txt
}
{
n
u
f

5
1

c
@
t
{
g
a
l
f
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ date
Fri 25 Feb 2022 10:57:31 PM +0545
```

9th flag: flag{3*3cut10n_d0n3!}

```
< }
---
> Z
> Z
> Z

priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ ls
execute_me.sh reverse_me.txt
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ cat execute_me.sh
echo "flag{3x3cut10n_d0n3!}"
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ date
Sat 26 Feb 2022 10:07:04 AM +0545
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$
```

10th flag: flag{d1ff_c0mm@nzd15_u53 ful!}

```
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ uniq -u .compare_me1.txt
f
l
a
g
{
d
1
f
f
-
c
0
m
m
@
n
z
d

1
5

-
u
5
3
f
u
l
!
}
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ date
Fri 25 Feb 2022 11:05:33 PM +0545
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$
```

11th flag: flag{comm@nzd}

```
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ date
Fri 25 Feb 2022 11:05:33 PM +0545
priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ uniq -u .compare_me2.txt

c
0
m
m
@
n
z
d

priyanka@priyanka-VirtualBox:~/Downloads/Main_Directory/5$ date
Fri 25 Feb 2022 11:10:24 PM +0545
```

Mkdir:

Syntax: mkdir<directory name>

```
priyanka@priyanka-VirtualBox:~$ pwd
/home/priyanka
priyanka@priyanka-VirtualBox:~$ ls
Desktop Documents Downloads hi main Music Pictures priyanka Public Templates Videos
priyanka@priyanka-VirtualBox:~$ mkdir task5
priyanka@priyanka-VirtualBox:~$ ls
Desktop Documents Downloads hi main Music Pictures priyanka Public task5 Templates Videos
priyanka@priyanka-VirtualBox:~$
```

Touch :

Syntax: touch<filename>

```
priyanka@priyanka-VirtualBox:~$ cd task5
priyanka@priyanka-VirtualBox:~/task5$ touch test1
priyanka@priyanka-VirtualBox:~/task5$ touch test2
priyanka@priyanka-VirtualBox:~/task5$ ls
test1 test2
priyanka@priyanka-VirtualBox:~/task5$
```

Cp :

Syntax: cp -r <source> <destination>

// -r helps to copy all the files and directories in source directory

```
priyanka@priyanka-VirtualBox:~/priyanka$ cd ..
priyanka@priyanka-VirtualBox:~$ ls
Desktop Documents Downloads hi main Music Pictures priyanka Public Templates Videos
priyanka@priyanka-VirtualBox:~$ cd priyanka
priyanka@priyanka-VirtualBox:~/priyanka$ ls
anjali task5
priyanka@priyanka-VirtualBox:~/priyanka$ cp -r anjali task5
priyanka@priyanka-VirtualBox:~/priyanka$ cd task5
priyanka@priyanka-VirtualBox:~/priyanka/task5$ ls
anjali
priyanka@priyanka-VirtualBox:~/priyanka/task5$
```

Rm:

Syntax: rm<file name>

```
priyanka@priyanka-VirtualBox:~/task5$ rm main
priyanka@priyanka-VirtualBox:~/task5$ ls
test1 test2
priyanka@priyanka-VirtualBox:~/task5$
```

Mv:

Syntax: mv< source >< destination >

```
priyanka@priyanka-VirtualBox:~$ ls
Desktop Documents Downloads hi main Music Pictures priyanka Public Templates Videos
priyanka@priyanka-VirtualBox:~$ mkdir task5
priyanka@priyanka-VirtualBox:~$ ls
Desktop Documents Downloads hi main Music Pictures priyanka Public task5 Templates Videos
priyanka@priyanka-VirtualBox:~$ mv task5 priyanka
priyanka@priyanka-VirtualBox:~$ cd priyanka
priyanka@priyanka-VirtualBox:~/priyanka$ ls
task5
priyanka@priyanka-VirtualBox:~/priyanka$
```

Rmdir:

Syntax: rmdir<directoryname>

```
priyanka@priyanka-VirtualBox:~/task5$ ls
test1 test2
priyanka@priyanka-VirtualBox:~/task5$ rm test1
priyanka@priyanka-VirtualBox:~/task5$ rm test2
priyanka@priyanka-VirtualBox:~/task5$ ls -a
. .
priyanka@priyanka-VirtualBox:~/task5$ cd ..
priyanka@priyanka-VirtualBox:~$ ls
Desktop Documents Downloads hi main Music Pictures priyanka Public task5 Templates Videos
priyanka@priyanka-VirtualBox:~$ rmdir task5
priyanka@priyanka-VirtualBox:~$ ls
Desktop Documents Downloads hi main Music Pictures priyanka Public Templates Videos
priyanka@priyanka-VirtualBox:~$
```

Question no:2

- No.1 Write a bash script to echo your name 25 times

```
1 #!/bin/bash
2 echo "enter a number"
3 read n
4 for((i=0;i<n;i++));
5 do
6 echo "priyanka"
7 done
```

```

priyanka@priyanka-VirtualBox:~/priyanka/task5$ bash no.1.sh
enter a number
25
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka
priyanka

```

- No.2 What command should I use to display the **first** 30 entries of syslog file?

Command: head -n 30 var/log/syslog

```

priyanka@priyanka-VirtualBox:/$ head -n 30 /var/log/syslog
an 12 13:32:08 priyanka-VirtualBox systemd-modules-load[248]: Inserted module 'lp'
an 12 13:32:08 priyanka-VirtualBox systemd-modules-load[248]: Inserted module 'ppdev'
an 12 13:32:08 priyanka-VirtualBox systemd-sysusers[258]: Creating group systemd-coredump with gid 999.
an 12 13:32:08 priyanka-VirtualBox systemd-sysusers[258]: Creating user systemd-coredump (systemd Core Dumper) with uid 999 and gid 999.
an 12 13:32:08 priyanka-VirtualBox systemd-modules-load[248]: Inserted module 'parport_pc'
an 12 13:32:08 priyanka-VirtualBox systemd-modules-load[248]: Inserted module 'msr'
an 12 13:32:08 priyanka-VirtualBox systemd-modules-load[248]: Module 'fuse' is built in
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Starting Flush Journal to Persistent Storage...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Finished Set the console keyboard layout.
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Finished udev Coldplug all Devices.
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Finished Create Static Device Nodes in /dev.
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Reached target Local File Systems (Pre).
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Mounting Mount unit for core18, revision 2128...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Mounting Mount unit for gnome-3-34-1804, revision 72...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Mounting Mount unit for gtk-common-themes, revision 1515...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Mounting Mount unit for snap-store, revision 547...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Mounting Mount unit for snapd, revision 12704...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Starting udev Kernel Device Manager...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Finished Flush Journal to Persistent Storage.
an 12 13:32:08 priyanka-VirtualBox systemd-modules-load[248]: Inserted module 'vmwgfx'
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Finished Load Kernel Modules.
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Mounting FUSE Control File System...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Mounting Kernel Configuration File System...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Starting Apply Kernel Variables...
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Mounted FUSE Control File System.
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Mounted Kernel Configuration File System.
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Condition check resulted in VMware vmblock fuse mount being skipped.
an 12 13:32:08 priyanka-VirtualBox systemd-sysctl[286]: Not setting net/ipv4/conf/all/promote_secondaries (explicit setting exists).
an 12 13:32:08 priyanka-VirtualBox systemd-sysctl[286]: Not setting net/ipv4/conf/default/promote_secondaries (explicit setting exists).
an 12 13:32:08 priyanka-VirtualBox systemd[1]: Finished Apply Kernel Variables.
priyanka@priyanka-VirtualBox:/$

```

- No.3. What command should I use to display the **last** 30 entries of syslog file?
- Command: tail -n 30 var/log/syslog


```

priyanka@priyanka-VirtualBox:/$ tail -n 30 /var/log/syslog
Feb 26 19:52:54 priyanka-VirtualBox gnome-shell[1508]: Window manager warning: Overwriting existing binding of keysym 31 with keysym 31 (keycode
).
Feb 26 19:52:54 priyanka-VirtualBox gnome-shell[1508]: Window manager warning: Overwriting existing binding of keysym 32 with keysym 32 (keycode
).
Feb 26 19:52:54 priyanka-VirtualBox gnome-shell[1508]: Window manager warning: Overwriting existing binding of keysym 33 with keysym 33 (keycode
).
Feb 26 19:52:54 priyanka-VirtualBox gnome-shell[1508]: Window manager warning: Overwriting existing binding of keysym 34 with keysym 34 (keycode
).
Feb 26 19:52:54 priyanka-VirtualBox gnome-shell[1508]: Window manager warning: Overwriting existing binding of keysym 35 with keysym 35 (keycode
).
Feb 26 19:52:54 priyanka-VirtualBox gnome-shell[1508]: Window manager warning: Overwriting existing binding of keysym 36 with keysym 36 (keycode
).
Feb 26 19:52:54 priyanka-VirtualBox gnome-shell[1508]: Window manager warning: Overwriting existing binding of keysym 38 with keysym 38 (keycode
1).
Feb 26 19:52:54 priyanka-VirtualBox gnome-shell[1508]: Window manager warning: Overwriting existing binding of keysym 39 with keysym 39 (keycode
2).
Feb 26 19:52:54 priyanka-VirtualBox gnome-shell[1508]: Window manager warning: Overwriting existing binding of keysym 37 with keysym 37 (keycode
0).
Feb 26 19:53:11 priyanka-VirtualBox systemd[1]: fprintd.service: Succeeded.
Feb 26 19:58:39 priyanka-VirtualBox systemd[1]: Starting Cleanup of Temporary Directories...
Feb 26 19:58:39 priyanka-VirtualBox systemd[1]: systemd-tmpfiles-clean.service: Succeeded.
Feb 26 19:58:39 priyanka-VirtualBox systemd[1]: Finished Cleanup of Temporary Directories.
Feb 26 19:59:08 priyanka-VirtualBox NetworkManager[587]: <info> [1645884848.3812] manager: NetworkManager state is now CONNECTED_SITE
Feb 26 19:59:08 priyanka-VirtualBox whoopsie[734]: [19:59:08] offline
Feb 26 19:59:08 priyanka-VirtualBox dbus-daemon[586]: [system] Activating via systemd: service name='org.freedesktop.nm_dispatcher' unit='dbus-or
.freedesktop.nm_dispatcher.service' requested by ':1.10' (uid=0 pid=587 comm="/usr/sbin/NetworkManager --no-daemon " label="unconfined")
Feb 26 19:59:08 priyanka-VirtualBox systemd[1]: Starting Network Manager Script Dispatcher Service...
Feb 26 19:59:08 priyanka-VirtualBox dbus-daemon[586]: [system] Successfully activated service 'org.freedesktop.nm_dispatcher'
Feb 26 19:59:08 priyanka-VirtualBox systemd[1]: Started Network Manager Script Dispatcher Service.
Feb 26 19:59:18 priyanka-VirtualBox systemd[1]: NetworkManager-dispatcher.service: Succeeded.
Feb 26 19:59:22 priyanka-VirtualBox NetworkManager[587]: <info> [1645884862.1501] manager: NetworkManager state is now CONNECTED_GLOBAL
Feb 26 19:59:22 priyanka-VirtualBox dbus-daemon[586]: [system] Activating via systemd: service name='org.freedesktop.nm_dispatcher' unit='dbus-or
.freedesktop.nm_dispatcher.service' requested by ':1.10' (uid=0 pid=587 comm="/usr/sbin/NetworkManager --no-daemon " label="unconfined")
Feb 26 19:59:22 priyanka-VirtualBox systemd[1]: Starting Network Manager Script Dispatcher Service...
Feb 26 19:59:22 priyanka-VirtualBox whoopsie[734]: [19:59:22] The default IPv4 route is: /org/freedesktop/NetworkManager/ActiveConnection/1
Feb 26 19:59:22 priyanka-VirtualBox whoopsie[734]: [19:59:22] Not a paid data plan: /org/freedesktop/NetworkManager/ActiveConnection/1
Feb 26 19:59:22 priyanka-VirtualBox whoopsie[734]: [19:59:22] Found usable connection: /org/freedesktop/NetworkManager/ActiveConnection/1
Feb 26 19:59:22 priyanka-VirtualBox dbus-daemon[586]: [system] Successfully activated service 'org.freedesktop.nm_dispatcher'
Feb 26 19:59:22 priyanka-VirtualBox systemd[1]: Started Network Manager Script Dispatcher Service.
Feb 26 19:59:23 priyanka-VirtualBox whoopsie[734]: [19:59:23] online
Feb 26 19:59:32 priyanka-VirtualBox systemd[1]: NetworkManager-dispatcher.service: Succeeded.

```

No.4 i. What command should I use to arrange the entries of a file

- Alphabetically
- Command: `sort var/log/syslog`

```

Jan 12 14:49:44 priyanka-VirtualBox systemd[1]: Started Network Manager Script Dispatcher Service.
Jan 12 14:49:44 priyanka-VirtualBox systemd[1]: Starting Network Manager Script Dispatcher Service...
Jan 12 14:49:44 priyanka-VirtualBox whoopsie[706]: [14:49:44] Found usable connection: /org/freedesktop/NetworkManager/ActiveConnection/1
Jan 12 14:49:44 priyanka-VirtualBox whoopsie[706]: [14:49:44] Not a paid data plan: /org/freedesktop/NetworkManager/ActiveConnection/1
Jan 12 14:49:44 priyanka-VirtualBox whoopsie[706]: [14:49:44] The default IPv4 route is: /org/freedesktop/NetworkManager/ActiveConnection/1
Jan 12 14:49:45 priyanka-VirtualBox whoopsie[706]: [14:49:45] online
Jan 12 14:49:54 priyanka-VirtualBox systemd[1]: NetworkManager-dispatcher.service: Succeeded.
Jan 12 14:49:57 priyanka-VirtualBox dbus-daemon[571]: [system] Activating via systemd: service name='org.freedesktop.nm_dispatcher' unit='dbus-org
.freedesktop.nm_dispatcher.service' requested by ':1.8' (uid=0 pid=573 comm="/usr/sbin/NetworkManager --no-daemon " label="unconfined")
Jan 12 14:49:57 priyanka-VirtualBox dbus-daemon[571]: [system] Successfully activated service 'org.freedesktop.nm_dispatcher'
Jan 12 14:49:57 priyanka-VirtualBox NetworkManager[573]: <info> [1641978297.8779] manager: NetworkManager state is now CONNECTED_SITE
Jan 12 14:49:57 priyanka-VirtualBox systemd[1]: Started Network Manager Script Dispatcher Service.
Jan 12 14:49:57 priyanka-VirtualBox systemd[1]: Starting Network Manager Script Dispatcher Service...
Jan 12 14:49:57 priyanka-VirtualBox whoopsie[706]: [14:49:57] offline
Jan 12 14:50:07 priyanka-VirtualBox systemd[1]: NetworkManager-dispatcher.service: Succeeded.
Jan 12 14:52:00 priyanka-VirtualBox PackageKit: daemon quit
Jan 12 14:52:00 priyanka-VirtualBox systemd[1]: packagekit.service: Succeeded.
Jan 12 14:52:05 priyanka-VirtualBox dbus-daemon[571]: [system] Activating via systemd: service name='org.freedesktop.nm_dispatcher' unit='dbus-org
.freedesktop.nm_dispatcher.service' requested by ':1.8' (uid=0 pid=573 comm="/usr/sbin/NetworkManager --no-daemon " label="unconfined")
Jan 12 14:52:05 priyanka-VirtualBox dbus-daemon[571]: [system] Successfully activated service 'org.freedesktop.nm_dispatcher'
Jan 12 14:52:05 priyanka-VirtualBox NetworkManager[573]: <info> [1641978425.5021] manager: NetworkManager state is now CONNECTED_GLOBAL
Jan 12 14:52:05 priyanka-VirtualBox systemd[1]: Started Network Manager Script Dispatcher Service.
Jan 12 14:52:05 priyanka-VirtualBox systemd[1]: Starting Network Manager Script Dispatcher Service...
Jan 12 14:52:05 priyanka-VirtualBox whoopsie[706]: [14:52:05] Found usable connection: /org/freedesktop/NetworkManager/ActiveConnection/1
Jan 12 14:52:05 priyanka-VirtualBox whoopsie[706]: [14:52:05] Not a paid data plan: /org/freedesktop/NetworkManager/ActiveConnection/1
Jan 12 14:52:05 priyanka-VirtualBox whoopsie[706]: [14:52:05] The default IPv4 route is: /org/freedesktop/NetworkManager/ActiveConnection/1
Jan 12 14:52:06 priyanka-VirtualBox whoopsie[706]: [14:52:06] online
Jan 12 14:52:15 priyanka-VirtualBox systemd[1]: NetworkManager-dispatcher.service: Succeeded.
Jan 12 14:53:15 priyanka-VirtualBox anacron[3492]: Updated timestamp for job 'cron.weekly' to 2022-01-12
Jan 12 14:53:15 priyanka-VirtualBox anacron[563]: Job 'cron.weekly' started
Jan 12 14:53:15 priyanka-VirtualBox anacron[563]: Job 'cron.weekly' terminated
Jan 12 14:53:39 priyanka-VirtualBox gnome-shell[2828]: cr_declaration_parse_list_from_buf: assertion 'parser' failed
Jan 12 14:53:39 priyanka-VirtualBox gnome-shell[2828]: cr_declaration_parse_list_from_buf: assertion 'parser' failed
Jan 12 14:53:39 priyanka-VirtualBox gnome-shell[2828]: cr_declaration_parse_list_from_buf: assertion 'parser' failed
Jan 12 14:53:39 priyanka-VirtualBox gnome-shell[2828]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jan 12 14:53:39 priyanka-VirtualBox gnome-shell[2828]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jan 12 14:53:39 priyanka-VirtualBox gnome-shell[2828]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jan 12 14:53:39 priyanka-VirtualBox gnome-shell[2828]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jan 12 14:53:40 priyanka-VirtualBox gnome-shell[2828]: cr_declaration_parse_list_from_buf: assertion 'parser' failed
Jan 12 14:53:40 priyanka-VirtualBox gnome-shell[2828]: cr_parser_new_from_buf: assertion 'a_buf && a_len' failed
Jan 12 14:53:40 priyanka-VirtualBox gnome-shell[2828]: g_dbus_connection_emit_signal: assertion 'G_IS_DBUS_CONNECTION (connection)' failed
Jan 12 14:55:03 priyanka-VirtualBox dbus-daemon[571]: [system] Activating via systemd: service name='net.reactivated.Fprint' unit='fprintd.service'
requested by ':1.156' (uid=1000 pid=2828 comm="/usr/bin/gnome-shell " label="unconfined")
Jan 12 14:55:03 priyanka-VirtualBox dbus-daemon[571]: [system] Successfully activated service 'net.reactivated.Fprint'
Jan 12 14:55:03 priyanka-VirtualBox systemd[1]: Started Fingerprint Authentication Daemon.
Jan 12 14:55:03 priyanka-VirtualBox systemd[1]: Starting Fingerprint Authentication Daemon...
Jan 12 14:55:20 priyanka-VirtualBox dbus-daemon[2570]: [session uid=1000 pid=2570] Activating service name='org.freedesktop.FileManager1' requeste
d by ':1.43' (uid=1000 pid=2828 comm="/usr/bin/gnome-shell " label="unconfined")
Jan 12 14:55:20 priyanka-VirtualBox dbus-daemon[2570]: [session uid=1000 pid=2570] Activating service name='org.gnome.Nautilus' requested by ':1.4
3' (uid=1000 pid=2828 comm="/usr/bin/gnome-shell " label="unconfined")
Jan 12 14:55:20 priyanka-VirtualBox dbus-daemon[2570]: [session uid=1000 pid=2570] Successfully activated service 'org.freedesktop.FileManager1'
Jan 12 14:55:20 priyanka-VirtualBox dbus-daemon[2570]: [session uid=1000 pid=2570] Successfully activated service 'org.gnome.Nautilus'
Jan 12 14:55:20 priyanka-VirtualBox gnome-shell[2828]: cr_declaration_parse_list_from_buf: assertion 'parser' failed

```

- ii. Reverse order

- command: `sort -r var/log/syslog`

```
Feb 25 12:38:33 priyanka-VirtualBox kernel: [ 0.000000] AMD AuthenticAMD
Feb 25 12:38:33 priyanka-VirtualBox dbus-daemon[597]: [system] AppArmor D-Bus mediation is enabled
Feb 25 12:38:33 priyanka-VirtualBox dbus-daemon[597]: [system] Activating via systemd: service name='org.freedesktop.hostname1' unit='dbus-org.freedesktop.hostname1.service' requested by ':1.12' (uid=0 pid=600 comm="/usr/sbin/NetworkManager --no-daemon " label="unconfined")
Feb 25 12:38:33 priyanka-VirtualBox dbus-daemon[597]: dbus[597]: Unknown group "power" in message bus configuration file
Feb 25 12:38:33 priyanka-VirtualBox cron[594]: (CRON) INFO (Running @reboot jobs)
Feb 25 12:38:33 priyanka-VirtualBox cron[594]: (CRON) INFO (pidfile fd = 3)
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: Successfully dropped root privileges.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: Successfully dropped remaining capabilities.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: Successfully called chroot().
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: Registering new address record for ::1 on lo.*.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: Registering new address record for 127.0.0.1 on lo.IPv4.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: No service file found in /etc/avahi/services.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: New relevant interface lo.IPv6 for mDNS.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: New relevant interface lo.IPv4 for mDNS.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: Network interface enumeration completed.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: Joining mDNS multicast group on interface lo.IPv6 with address ::1.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: Joining mDNS multicast group on interface lo.IPv4 with address 127.0.0.1.
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: Found user 'avahi' (UID 115) and group 'avahi' (GID 121).
Feb 25 12:38:33 priyanka-VirtualBox avahi-daemon[593]: avahi-daemon 0.7 starting up.
Feb 25 12:38:33 priyanka-VirtualBox apport[592]: * Starting automatic crash report generation: apport
Feb 25 12:38:33 priyanka-VirtualBox apport[592]: ...done.
Feb 25 12:38:33 priyanka-VirtualBox apparmor.systemd[571]: Skipping profile in /etc/apparmor.d/disable: usr.sbin.rsyslogd
Feb 25 12:38:33 priyanka-VirtualBox apparmor.systemd[543]: Skipping profile in /etc/apparmor.d/disable: usr.bin.firefox
Feb 25 12:38:33 priyanka-VirtualBox apparmor.systemd[543]: Restarting AppArmor
Feb 25 12:38:33 priyanka-VirtualBox apparmor.systemd[543]: Reloading AppArmor profiles
Feb 25 12:38:33 priyanka-VirtualBox alsactl[677]: /usr/sbin/alsactl: load_state:1683: Cannot open /var/lib/alsa/asound.state for reading: No such file or directory
Feb 25 12:38:33 priyanka-VirtualBox alsactl[677]: Hardware is initialized using a generic method
Feb 25 12:38:33 priyanka-VirtualBox alsactl[677]: Found hardware: "ICH" "Analog Devices AD1980" "AC97a:41445370" "0x1028" "0x0177"
Feb 25 12:38:33 priyanka-VirtualBox alsactl[677]: alsa-lib main.c:1014:(snd_use_case_mgr_open) error: failed to import hw:0 use case configuration
Feb 25 12:38:33 priyanka-VirtualBox acpid: waiting for events: event logging is off
Feb 25 12:38:33 priyanka-VirtualBox acpid: starting up with netlink and the input layer
Feb 25 12:38:33 priyanka-VirtualBox acpid: 8 rules loaded
Feb 25 12:38:33 priyanka-VirtualBox accounts-daemon[590]: started daemon version 0.6.55
Feb 26 12:42:05 priyanka-VirtualBox kernel: [ 0.000000] Linux version 5.11.0-46-generic (buildd@lgw01-amd64-010) (gcc (Ubuntu 9.3.0-17ubuntu1-2 0.04) 9.3.0, GNU ld (GNU Binutils for Ubuntu) 2.34) #51-20.04.1-Ubuntu SMP Fri Jan 7 06:51:40 UTC 2022 (Ubuntu 5.11.0-46.51-20.04.1-generic 5.11.2 2)
Feb 25 19:00:58 priyanka-VirtualBox systemd-modules-load[246]: Inserted module 'lp'
Feb 25 13:15:57 priyanka-VirtualBox kernel: [ 0.000000] Linux version 5.11.0-46-generic (buildd@lgw01-amd64-010) (gcc (Ubuntu 9.3.0-17ubuntu1-2 0.04) 9.3.0, GNU ld (GNU Binutils for Ubuntu) 2.34) #51-20.04.1-Ubuntu SMP Fri Jan 7 06:51:40 UTC 2022 (Ubuntu 5.11.0-46.51-20.04.1-generic 5.11.2 2)
Feb 25 13:34:51 priyanka-VirtualBox systemd-modules-load[248]: Inserted module 'lp'
Feb 26 15:24:01 priyanka-VirtualBox kernel: [ 0.000000] Linux version 5.11.0-46-generic (buildd@lgw01-amd64-010) (gcc (Ubuntu 9.3.0-17ubuntu1-2 0.04) 9.3.0, GNU ld (GNU Binutils for Ubuntu) 2.34) #51-20.04.1-Ubuntu SMP Fri Jan 7 06:51:40 UTC 2022 (Ubuntu 5.11.0-46.51-20.04.1-generic 5.11.2 2)
Jan 13 19:47:22 priyanka-VirtualBox kernel: [ 0.000000] Linux version 5.11.0-46-generic (buildd@lgw01-amd64-010) (gcc (Ubuntu 9.3.0-17ubuntu1-2 0.04) 9.3.0, GNU ld (GNU Binutils for Ubuntu) 2.34) #51-20.04.1-Ubuntu SMP Fri Jan 7 06:51:40 UTC 2022 (Ubuntu 5.11.0-46.51-20.04.1-generic 5.11.2 2)
Feb 25 18:11:04 priyanka-VirtualBox systemd-modules-load[249]: Inserted module 'lp'
```

priyanka@priyanka-VirtualBox:/\$

- iii. Numerical order
- command: `sort -n var/log/syslog`


```

Jan 18 21:20:55 priyanka-VirtualBox systemd[1]: NetworkManager-dispatcher.service: Succeeded.
Jan 18 21:21:54 priyanka-VirtualBox systemd[1]: Reloading.
Jan 18 21:21:54 priyanka-VirtualBox systemd[1]: Reloading.
Jan 18 21:21:55 priyanka-VirtualBox kernel: [ 1014.508115] loop12: detected capacity change from 0 to 507712
Jan 18 21:21:55 priyanka-VirtualBox systemd[1]: Mounted Mount unit for gnome-3-38-2004, revision 87.
Jan 18 21:21:55 priyanka-VirtualBox systemd[1]: Mounting Mount unit for gnome-3-38-2004, revision 87...
Jan 18 21:22:01 priyanka-VirtualBox kernel: [ 1021.314281] audit: type=1400 audit(1642520221.986:69): apparmor="STATUS" operation="profile_replace" info="same as current profile, skipping" profile="unconfined" name="/snap/snapd/14295/usr/lib/snapd/snap-confine" pid=3133 comm="apparmor_parser"
Jan 18 21:22:01 priyanka-VirtualBox kernel: [ 1021.314300] audit: type=1400 audit(1642520221.986:70): apparmor="STATUS" operation="profile_replace" info="same as current profile, skipping" profile="unconfined" name="/snap/snapd/14295/usr/lib/snapd/snap-confine/mount-namespace-capture-helper" pid=3133 comm="apparmor_parser"
Jan 18 21:22:02 priyanka-VirtualBox kernel: [ 1021.672882] audit: type=1400 audit(1642520222.346:71): apparmor="STATUS" operation="profile_replace" profile="unconfined" names="snap.snap-store.hook.configure" pid=3136 comm="apparmor_parser"
Jan 18 21:22:03 priyanka-VirtualBox kernel: [ 1022.837381] audit: type=1400 audit(1642520223.510:72): apparmor="STATUS" operation="profile_replace" profile="unconfined" names="snap.snap-store.ubuntu-software" pid=3138 comm="apparmor_parser"
Jan 18 21:22:03 priyanka-VirtualBox kernel: [ 1022.891717] audit: type=1400 audit(1642520223.566:73): apparmor="STATUS" operation="profile_replace" profile="unconfined" names="snap.snap-store.snap-store" pid=3137 comm="apparmor_parser"
Jan 18 21:22:03 priyanka-VirtualBox kernel: [ 1023.040540] audit: type=1400 audit(1642520223.714:74): apparmor="STATUS" operation="profile_replace" profile="unconfined" names="snap-update-ns.snap-store" pid=3135 comm="apparmor_parser"
Jan 18 21:22:03 priyanka-VirtualBox kernel: [ 1023.261732] audit: type=1400 audit(1642520223.934:75): apparmor="STATUS" operation="profile_replace" profile="unconfined" names="snap.snap-store.ubuntu-software-local-file" pid=3139 comm="apparmor_parser"
Jan 18 21:22:04 priyanka-VirtualBox systemd[1]: Started snap.snap-store.hook.configure.6e21aff5-7471-4625-8119-5841bd5f26b0.scope.
Jan 18 21:22:05 priyanka-VirtualBox systemd[1517]: tmp-snap.rootfs.23EtPD.mount: Succeeded.
Jan 18 21:22:05 priyanka-VirtualBox systemd[1]: tmp-snap.rootfs.23EtPD.mount: Succeeded.
Jan 18 21:22:11 priyanka-VirtualBox systemd[1]: snap.snap-store.hook.configure.6e21aff5-7471-4625-8119-5841bd5f26b0.scope: Succeeded.
Jan 18 21:36:13 priyanka-VirtualBox systemd[1]: Condition check resulted in Daily apt upgrade and clean activities being skipped.
Jan 18 21:36:13 priyanka-VirtualBox systemd[1]: Condition check resulted in Run anacron jobs being skipped.
Jan 18 21:36:26 priyanka-VirtualBox snapd[1333]: storehelpers.go:710: cannot refresh: snap has no updates available: "core18", "gnome-3-34-1804", "gtk-common-themes", "snap-store", "snapd"
Jan 18 21:37:03 priyanka-VirtualBox CRON[3175]: (root) CMD ([ -x /etc/init.d/anacron ] && if [ ! -d /run/systemd/system ]; then /usr/sbin/invoke-r
c.d anacron start >/dev/null; fi)
Jan 18 21:38:20 priyanka-VirtualBox kernel: [ 1158.292275] usb 1-1: USB disconnect, device number 3
Jan 18 21:38:20 priyanka-VirtualBox kernel: [ 1158.745302] e1000: enp0s3 NIC Link is Down
Jan 18 21:38:20 priyanka-VirtualBox kernel: [ 1158.873990] usb 1-1: new full-speed USB device number 4 using ohci-pci
Jan 18 21:38:20 priyanka-VirtualBox /usr/lib/gdm3/gdm-x-session[1582]: (EE) system-logind: failed to release device: Device not taken
Jan 18 21:38:20 priyanka-VirtualBox /usr/lib/gdm3/gdm-x-session[1582]: (II) config/udev: removing device VirtualBox USB Tablet
Jan 18 21:38:20 priyanka-VirtualBox /usr/lib/gdm3/gdm-x-session[1582]: (II) event5 - VirtualBox USB Tablet: device removed
Jan 18 21:38:20 priyanka-VirtualBox /usr/lib/gdm3/gdm-x-session[1582]: (II) system-logind: releasing fd for 13:69
Jan 18 21:38:20 priyanka-VirtualBox /usr/lib/gdm3/gdm-x-session[1582]: (II) UnloadModule: "libinput"
Jan 18 21:38:20 priyanka-VirtualBox /usr/lib/gdm3/gdm-x-session[1582]: (**) Option "fd" "41"
Jan 18 21:38:21 priyanka-VirtualBox systemd-modules-load[251]: Inserted module 'lp'
Jan 18 21:38:21 priyanka-VirtualBox kernel: [ 1159.580944] usb 1-1: New USB device found, idVendor=80EE, idProduct=0021, bcdDevice= 1.00
Jan 18 21:38:21 priyanka-VirtualBox kernel: [ 1159.580954] usb 1-1: New USB device strings: Mfr=1, Product=3, SerialNumber=0
Jan 18 21:38:21 priyanka-VirtualBox kernel: [ 1159.580957] usb 1-1: Product: USB Tablet
Jan 18 21:38:21 priyanka-VirtualBox kernel: [ 1159.580960] usb 1-1: Manufacturer: VirtualBox
Jan 18 21:38:21 priyanka-VirtualBox kernel: [ 1159.805886] input: VirtualBox USB Tablet as /devices/pci0000:00/0000:00:06.0/usb1/1-1/1-1.0/0003:80EE:0021:0003/input/input9
Jan 18 21:38:21 priyanka-VirtualBox kernel: [ 1159.806318] hid-generic 0003:80EE:0021:0003: input,hidraw0: USB HID v1.10 Mouse [VirtualBox USB Tab
let] on usb-0000:00:06.0-1/input0
Jan 18 21:38:21 priyanka-VirtualBox mtp-probe: checking bus 1, device 4: "/sys/devices/pci0000:00/0000:00:06.0/usb1/1-1"
priyanka@priyanka-VirtualBox:~$

```

- No.5Copee 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`

```

priyanka@priyanka-VirtualBox:~$ ls
Desktop Documents Downloads hi main Music Pictures priyanka Public sys.log Templates Videos
priyanka@priyanka-VirtualBox:~$ nano criminal.txt
priyanka@priyanka-VirtualBox:~$ ls
criminal.txt Desktop Documents Downloads hi main Music Pictures priyanka Public sys.log Templates Videos
priyanka@priyanka-VirtualBox:~$ sort criminal.txt | uniq -u

gopal
priyanka@priyanka-VirtualBox:~$
priyanka@priyanka-VirtualBox:~$
priyanka@priyanka-VirtualBox:~$
priyanka@priyanka-VirtualBox:~$

```

- What are the three parts of file's permission?

The three parts of file's permissions are briefly mentioned below:

Read: This permission allows user to read the content, assess it but forbid to do any changes in file. Command like `chmod` in linux helps to make the file read only.

Write: This permission allows user to edit and do changes in content of files. Command like `touch` in linux helps to write and create file.

Execute: This permission allows to execute the program and use the files as commands. Command like `cd` in linux helps to enter into directory.

