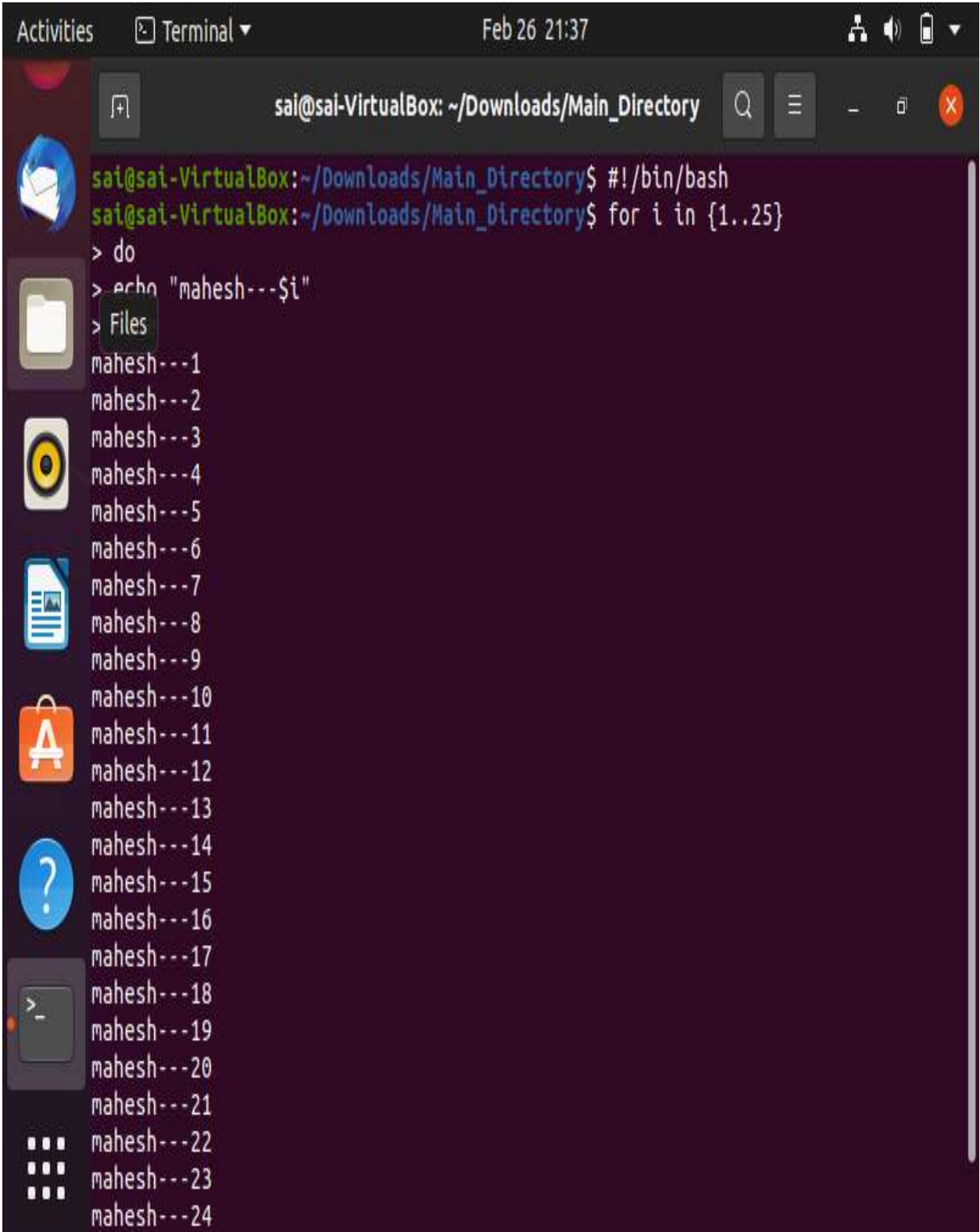


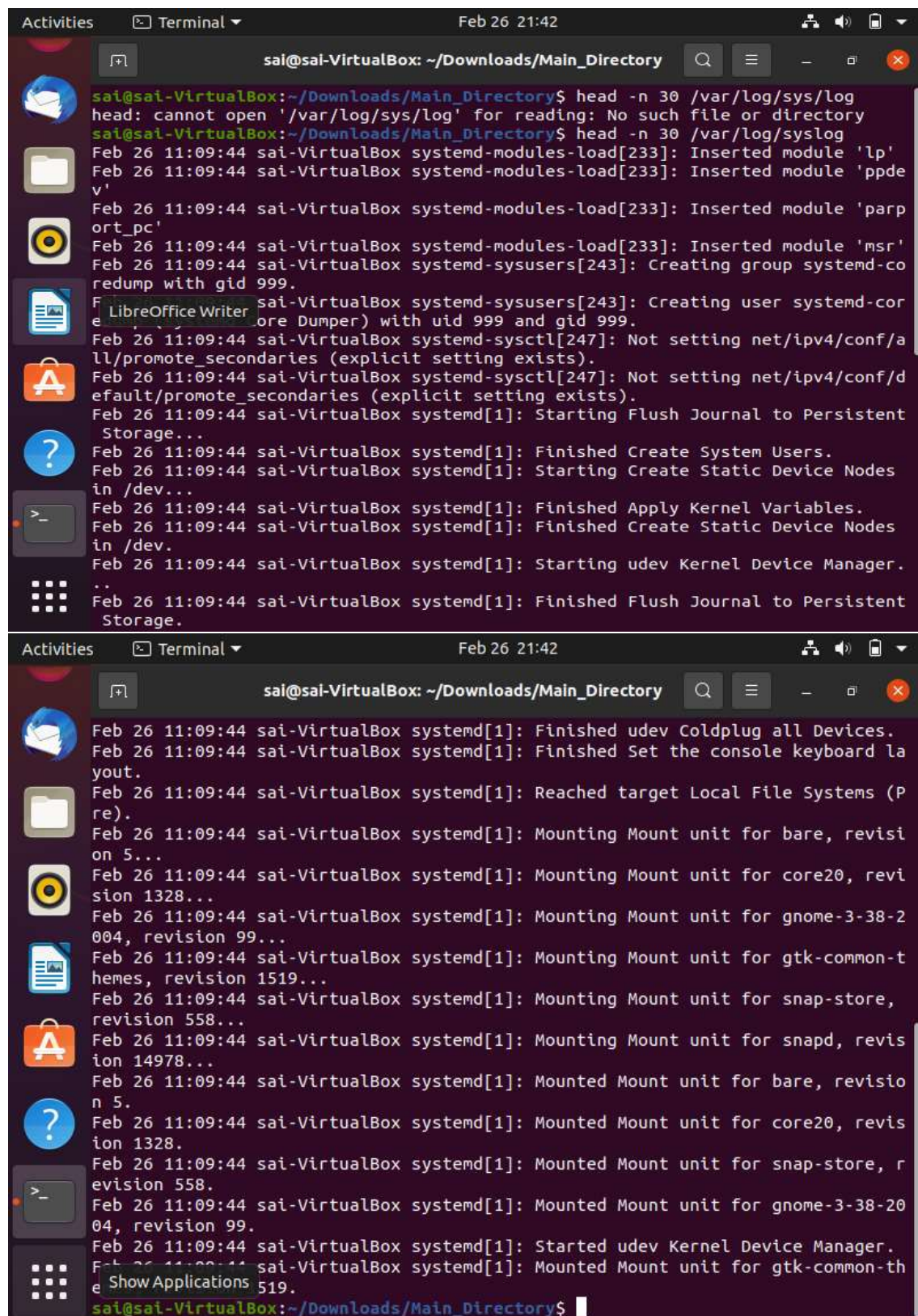
## Task 5 part 2

Question 1: Write a bash script to echo your name 25 times

A terminal window titled "Terminal" with a date and time of "Feb 26 21:37". The window shows a user named "sai" at a host named "sai-VirtualBox" in the directory "~/Downloads/Main\_Directory". The user has entered a bash script to echo the name "mahesh" 25 times. The script consists of a loop that iterates from 1 to 25, with each iteration echoing "mahesh---" followed by the iteration number. The output shows the first 24 iterations, with the 25th iteration being cut off.

```
sai@sai-VirtualBox: ~/Downloads/Main_Directory
sai@sai-VirtualBox:~/Downloads/Main_Directory$ #!/bin/bash
sai@sai-VirtualBox:~/Downloads/Main_Directory$ for i in {1..25}
> do
> echo "mahesh---$i"
mahesh---1
mahesh---2
mahesh---3
mahesh---4
mahesh---5
mahesh---6
mahesh---7
mahesh---8
mahesh---9
mahesh---10
mahesh---11
mahesh---12
mahesh---13
mahesh---14
mahesh---15
mahesh---16
mahesh---17
mahesh---18
mahesh---19
mahesh---20
mahesh---21
mahesh---22
mahesh---23
mahesh---24
```

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



```
sai@sai-VirtualBox: ~/Downloads/Main_Directory
sai@sai-VirtualBox:~/Downloads/Main_Directory$ head -n 30 /var/log/sys/log
head: cannot open '/var/log/sys/log' for reading: No such file or directory
sai@sai-VirtualBox:~/Downloads/Main_Directory$ head -n 30 /var/log/syslog
Feb 26 11:09:44 sai-VirtualBox systemd-modules-load[233]: Inserted module 'lp'
Feb 26 11:09:44 sai-VirtualBox systemd-modules-load[233]: Inserted module 'ppdev'
Feb 26 11:09:44 sai-VirtualBox systemd-modules-load[233]: Inserted module 'parport_pc'
Feb 26 11:09:44 sai-VirtualBox systemd-modules-load[233]: Inserted module 'msr'
Feb 26 11:09:44 sai-VirtualBox systemd-sysusers[243]: Creating group systemd-core with gid 999.
Feb 26 11:09:44 sai-VirtualBox systemd-sysusers[243]: Creating user systemd-core (systemd-core Dumper) with uid 999 and gid 999.
Feb 26 11:09:44 sai-VirtualBox systemd-sysctl[247]: Not setting net/ipv4/conf/all/promote_secondaries (explicit setting exists).
Feb 26 11:09:44 sai-VirtualBox systemd-sysctl[247]: Not setting net/ipv4/conf/default/promote_secondaries (explicit setting exists).
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Starting Flush Journal to Persistent Storage...
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Finished Create System Users.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Starting Create Static Device Nodes in /dev...
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Finished Apply Kernel Variables.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Finished Create Static Device Nodes in /dev.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Starting udev Kernel Device Manager.
..
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Finished Flush Journal to Persistent Storage.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Finished udev Coldplug all Devices.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Finished Set the console keyboard layout.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Reached target Local File Systems (Pre).
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounting Mount unit for bare, revision 5...
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounting Mount unit for core20, revision 1328...
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounting Mount unit for gnome-3-38-2004, revision 99...
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounting Mount unit for gtk-common-themes, revision 1519...
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounting Mount unit for snap-store, revision 558...
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounting Mount unit for snapd, revision 14978...
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounted Mount unit for bare, revision 5.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounted Mount unit for core20, revision 1328.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounted Mount unit for snap-store, revision 558.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounted Mount unit for gnome-3-38-2004, revision 99.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Started udev Kernel Device Manager.
Feb 26 11:09:44 sai-VirtualBox systemd[1]: Mounted Mount unit for gtk-common-themes, revision 1519.
sai@sai-VirtualBox:~/Downloads/Main_Directory$
```



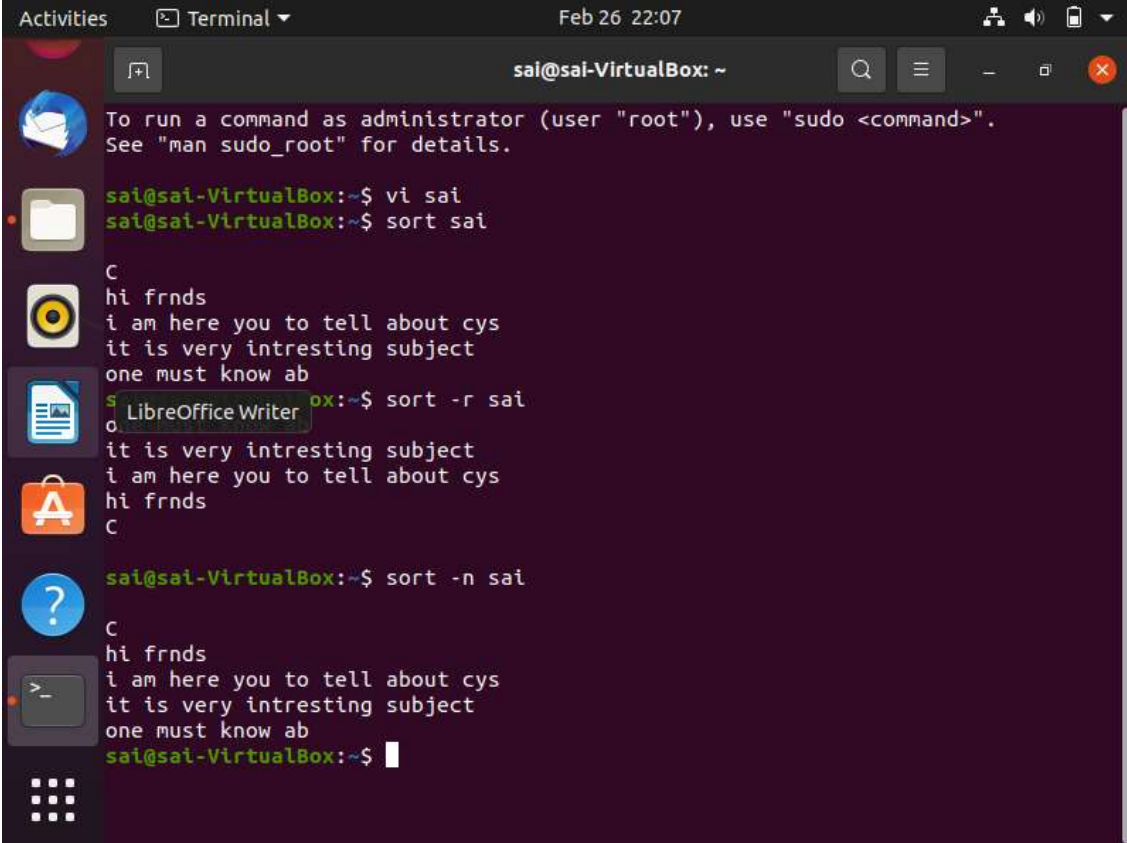
Question 3: What command should I use to display the last 30 entries of syslog file?

```
Activities Terminal Feb 26 21:44
sai@sai-VirtualBox: ~/Downloads/Main_Directory
Feb 26 21:23:14 sai-VirtualBox dbus-daemon[540]: [system] Activating via system
d: service name='org.freedesktop.timedate1' unit='dbus-org.freedesktop.timedate
1.service' requested by ':1.27' (uid=0 pid=562 comm="/usr/lib/snapd/snapd " lab
el="unconfined")
Feb 26 21:23:14 sai-VirtualBox systemd[1]: Starting Time & Date Service...
Feb 26 21:23:14 sai-VirtualBox dbus-daemon[540]: [system] Successfully activate
d service 'org.freedesktop.timedate1'
Feb 26 21:23:14 sai-VirtualBox systemd[1]: Started Time & Date Service.
Feb 26 21:23:37 sai-VirtualBox PackageKit: daemon quit
Feb 26 21:23:37 sai-VirtualBox systemd[1]: packagekit.service: Succeeded.
Feb 26 21:23:44 sai-VirtualBox systemd[1]: systemd-timedated.service: Succeeded
.
Feb 26 21:30:01 sai-VirtualBox CRON[1693]: (root) CMD ([ -x /etc/init.d/anacron
] && if [ ! -d /run/systemd/system ]; then /usr/sbin/invoke-rc.d anacron start
>/dev/null; fi)
Feb 26 21:33:13 sai-VirtualBox systemd[1]: Starting Cleanup of Temporary Direct
ories...
Feb 26 21:33:13 sai-VirtualBox systemd[1]: systemd-tmpfiles-clean.service: Succ
eeded.
Feb 26 21:33:13 sai-VirtualBox systemd[1]: Finished Cleanup of Temporary Direct
ories.
Feb 26 21:33:30 sai-VirtualBox systemd[1]: Condition check resulted in Run anac
ron jobs being skipped.
Feb 26 21:34:36 sai-VirtualBox systemd[1]: Starting Ubuntu Advantage Timer for
running repeated jobs...
Feb 26 21:34:36 sai-VirtualBox systemd[1]: ua-timer.service: Succeeded.
Feb 26 21:34:36 sai-VirtualBox systemd[1]: Finished Ubuntu Advantage Timer for
running repeated jobs.
sai@sai-VirtualBox:~/Downloads/Main_Directory$
```

```
Activities Terminal Feb 26 21:44
sai@sai-VirtualBox: ~/Downloads/Main_Directory
sai@sai-VirtualBox:~/Downloads/Main_Directory$ tail -n 30 /var/log/syslog
Feb 26 21:19:15 sai-VirtualBox systemd[1088]: tracker-store.service: Succeeded.
Feb 26 21:19:17 sai-VirtualBox geoclue[915]: Service not used for 60 seconds. S
hutting down..
Feb 26 21:19:17 sai-VirtualBox systemd[1]: geoclue.service: Succeeded.
Feb 26 21:19:30 sai-VirtualBox gnome-shell[1310]: Window manager warning: Overw
riting existing binding of keysym 32 with keysym 32 (keycode b).
Feb 26 21:19:30 sai-VirtualBox gnome-shell[1310]: Window manager warning: Overw
riting existing binding of keysym 33 with keysym 33 (keycode c).
Feb 26 21:19:30 sai-VirtualBox gnome-shell[1310]: Window manager warning: Overw
riting existing binding of keysym 34 with keysym 34 (keycode d).
Feb 26 21:19:30 sai-VirtualBox gnome-shell[1310]: Window manager warning: Overw
riting existing binding of keysym 35 with keysym 35 (keycode e).
Feb 26 21:19:30 sai-VirtualBox gnome-shell[1310]: Window manager warning: Overw
riting existing binding of keysym 38 with keysym 38 (keycode 11).
Feb 26 21:19:30 sai-VirtualBox gnome-shell[1310]: Window manager warning: Overw
riting existing binding of keysym 39 with keysym 39 (keycode 12).
Feb 26 21:19:30 sai-VirtualBox gnome-shell[1310]: Window manager warning: Overw
riting existing binding of keysym 36 with keysym 36 (keycode f).
Feb 26 21:19:30 sai-VirtualBox gnome-shell[1310]: Window manager warning: Overw
riting existing binding of keysym 31 with keysym 31 (keycode a).
Feb 26 21:19:30 sai-VirtualBox gnome-shell[1310]: Window manager warning: Overw
riting existing binding of keysym 37 with keysym 37 (keycode 10).
Feb 26 21:21:30 sai-VirtualBox systemd[1]: Condition check resulted in Run anac
ron jobs being skipped.
Feb 26 21:22:04 sai-VirtualBox systemd-timesyncd[489]: Timed out waiting for re
ply from 91.189.91.157:123 (ntp.ubuntu.com).
Feb 26 21:22:04 sai-VirtualBox systemd-timesyncd[489]: Initial synchronization
to time server 91.189.89.199:123 (ntp.ubuntu.com).
```

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

- 1) **Alphabetically**: sort filename
- 2) **Reverse order**: sort -r filename
- 3) **Numerical order**: sort -n filename

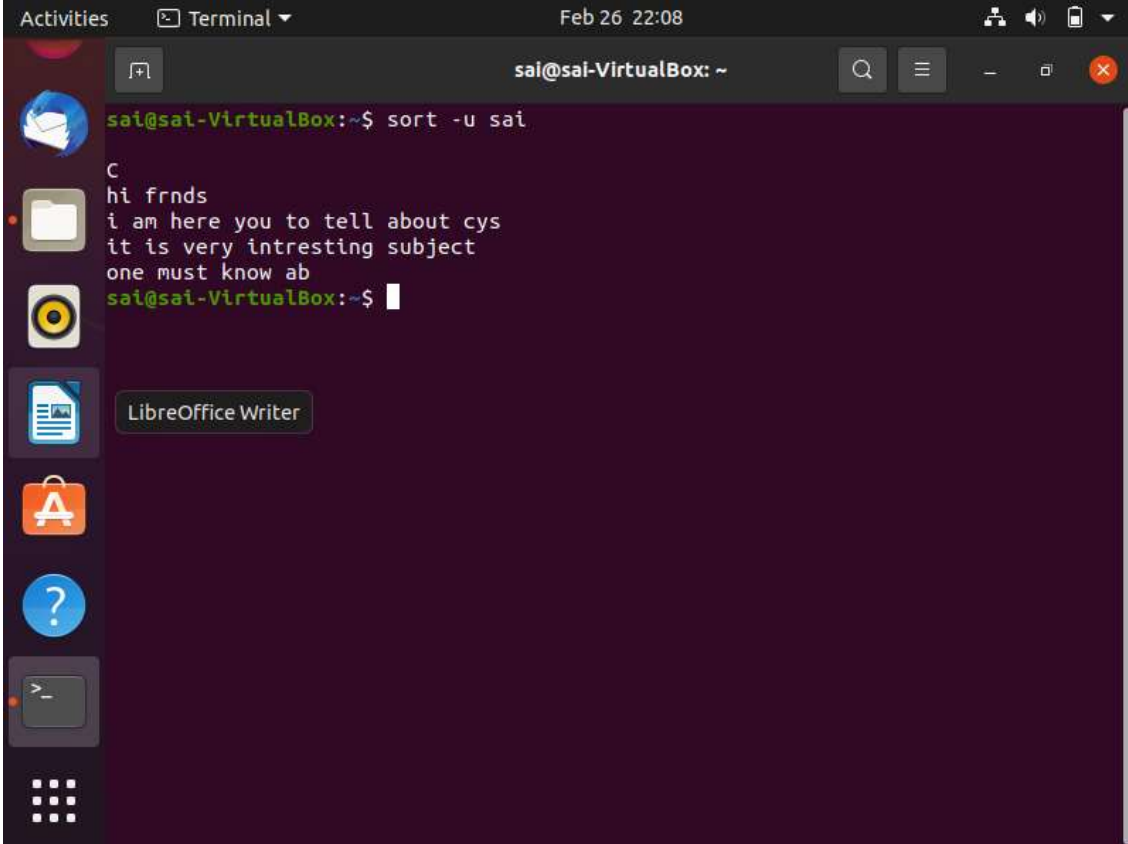


The screenshot shows a terminal window titled 'sai@sai-VirtualBox: ~' with a dark background. The window contains the following text:

```
Activities  Terminal  Feb 26 22:07
sai@sai-VirtualBox: ~
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
sai@sai-VirtualBox:~$ vi sai
sai@sai-VirtualBox:~$ sort sai
C
hi frnds
i am here you to tell about cys
it is very intresting subject
one must know ab
sai@sai-VirtualBox:~$ sort -r sai
o
it is very intresting subject
i am here you to tell about cys
hi frnds
C
sai@sai-VirtualBox:~$ sort -n sai
C
hi frnds
i am here you to tell about cys
it is very intresting subject
one must know ab
sai@sai-VirtualBox:~$
```

On the left side of the terminal window, there is a vertical sidebar with several application icons: a file manager, a terminal, a LibreOffice Writer document, and an application store. The terminal icon is currently selected.

Question 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?



The screenshot shows a Linux desktop environment. At the top, there is a panel with 'Activities', 'Terminal', and the date 'Feb 26 22:08'. Below this is a sidebar with several application icons: a mail icon, a folder icon, a CD icon, a LibreOffice Writer icon, an App Store icon, a question mark icon, and a terminal icon. The main window is a terminal titled 'sai@sai-VirtualBox: ~'. It shows the command 'sort -u sai' being executed, followed by the output: 'C', 'hi frnds', 'i am here you to tell about cys', 'it is very intresting subject', 'one must know ab', and the prompt 'sai@sai-VirtualBox:~\$'.

```
sai@sai-VirtualBox:~$ sort -u sai
C
hi frnds
i am here you to tell about cys
it is very intresting subject
one must know ab
sai@sai-VirtualBox:~$
```

Question 6: What are the Three parts of file's permission?

Ans: Main security permissions:

r -> read

w->write

x->execute

Four parts of file's permissions:

r w x -> user can read, write and execute the file.

r - x -> user can read and execute but can't write the file.

r w - -> user can read and write but can't execute the file.

r - - -> user can only read the file but can't write or execute it.

