

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

```
Text Editor Feb 27 14:16
test.sh
1 #!/bin/bash
2 for ((c=25;c>0;c--))
3 do
4 echo "Jaiadityan"
5 done
6
```

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

```
jaiadityanjaiadityan-VirtualBox:~$ head -30 /var/log/syslog
Feb 27 13:56:01 jaiadityan-VirtualBox rsyslogd: [origin software="rsyslogd" swVersion="8.2001.0" x-pid="635" x-info="https://www.rsyslog.com"] rsyslogd was HUPed
Feb 27 13:56:01 jaiadityan-VirtualBox systemd[1]: Started GNOME Display Manager.
Feb 27 13:56:01 jaiadityan-VirtualBox systemd[1]: Received SIGRTMIN+21 from PID 327 (plymouthd).
Feb 27 13:56:01 jaiadityan-VirtualBox systemd[1]: Started Modem Manager.
Feb 27 13:56:01 jaiadityan-VirtualBox systemd[1]: logrotate.service: Succeeded.
Feb 27 13:56:01 jaiadityan-VirtualBox systemd[1]: Finished Rotate log files.
Feb 27 13:56:01 jaiadityan-VirtualBox snapd[642]: daemon.go:246: started snapd/2.54.3-20.04.ubuntu.2 (series 16; classic) ubuntu/20.04 (amd64) linux/5.13.0-30-generic.
Feb 27 13:56:01 jaiadityan-VirtualBox dbus-daemon[610]: [system] Successfully activated service 'org.freedesktop.hostname1'
Feb 27 13:56:01 jaiadityan-VirtualBox systemd[1]: Started Hostname Service.
Feb 27 13:56:01 jaiadityan-VirtualBox systemd[1]: Started Dispatcher daemon for system-networkd.
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.6675] hostname: using hostname
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.6675] hostname: hostname changed from (none) to "jaiadityan-VirtualBox"
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.6679] dns-mgr[0x55e0c9f24290]: lnt: dns=systemd-resolved rc-manager=synlink, plugin=systemd-resolved
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.6683] manager[0x55e0c9f3f040]: rfkll: WL-Fi hardware radio set enabled
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.6683] manager[0x55e0c9f3f040]: rfkll: WWAN hardware radio set enabled
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.6826] Loaded device plugin: NMAtmManager (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-adsl.so)
Feb 27 13:56:01 jaiadityan-VirtualBox udisksd[647]: Acquired the name org.freedesktop.UDisks2 on the system message bus
Feb 27 13:56:01 jaiadityan-VirtualBox systemd[1]: Started Disk Manager.
Feb 27 13:56:01 jaiadityan-VirtualBox kernel[1]: 37.301752] loop1: detected capacity change from 0 to 8
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.6898] Loaded device plugin: NMBLuezManager (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-bluetooth.so)
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.6933] Loaded device plugin: NMWifiFactory (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-wifi.so)
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.7066] Loaded device plugin: NMTeamFactory (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-team.so)
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.7088] Loaded device plugin: NMWwanFactory (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-wwan.so)
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.7096] manager: rfkll: WL-Fi enabled by radio killswitch; enabled by state file
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.7100] manager: rfkll: WWAN enabled by radio killswitch; enabled by state file
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.7101] manager: Networking is enabled by state file
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.7103] dhcp-lnt: using dhcp client 'internal'
Feb 27 13:56:01 jaiadityan-VirtualBox dbus-daemon[610]: [system] Activating via systemd: service name='org.freedesktop.nm_dispatcher' unit='dbus-org.freedesktop.nm_dispatcher.service' requested by ':1.11' (uid=0 pid=620 comm="/usr/sbin/NetworkManager --no-daemon" label="unconfined")
Feb 27 13:56:01 jaiadityan-VirtualBox NetworkManager[620]: <Info> [1645959361.7123] settings: Loaded settings plugin: ifupdown (" /usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-settings-plugin-ifupdown.so")
jaiadityanjaiadityan-VirtualBox:~$
```

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

```
jaiadityanjaiadityan-VirtualBox:~$ tail -30 /var/log/syslog
Feb 27 14:21:12 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 37 with keysym 37 (keycode 10).
Feb 27 14:21:14 jaiadityan-VirtualBox pulseaudio[831]: GetManagedObjects() failed: org.freedesktop.DBus.Error.NoReply: Did not receive a reply. Possible causes include: the remote application did not send a reply, the message bus security policy blocked the reply, the reply timeout expired, or the network connection was broken.
Feb 27 14:21:16 jaiadityan-VirtualBox systemd[1]: system-fsckd.service: Succeeded.
Feb 27 14:21:16 jaiadityan-VirtualBox systemd[802]: gnome-launched-gnome-control-center.desktop-1503.scope: Succeeded.
Feb 27 14:21:17 jaiadityan-VirtualBox systemd-timesyncd[569]: Initial synchronization to time server 91.189.91.157:123 (ntp.ubuntu.com).
Feb 27 14:21:19 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 31 with keysym 31 (keycode a).
Feb 27 14:21:19 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 32 with keysym 32 (keycode b).
Feb 27 14:21:19 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 33 with keysym 33 (keycode c).
Feb 27 14:21:19 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 34 with keysym 34 (keycode d).
Feb 27 14:21:19 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 35 with keysym 35 (keycode e).
Feb 27 14:21:19 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 38 with keysym 38 (keycode i).
Feb 27 14:21:19 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 39 with keysym 39 (keycode j).
Feb 27 14:21:19 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 36 with keysym 36 (keycode f).
Feb 27 14:21:19 jaiadityan-VirtualBox gnome-shell[1155]: Window manager warning: Overwriting existing binding of keysym 37 with keysym 37 (keycode 10).
Feb 27 14:21:20 jaiadityan-VirtualBox systemd[1]: system-timedated.service: Succeeded.
Feb 27 14:21:20 jaiadityan-VirtualBox systemd[802]: Started Application launched by gnome-shell.
Feb 27 14:21:21 jaiadityan-VirtualBox dbus-daemon[840]: [session uid=1000 pid=840] Activating via systemd: service name='org.gnome.Terminal' unit='gnome-terminal-server.service' requested by ':1.97' (uid=1000 pid=1539 comm="/usr/bin/gnome-terminal.real --window" label="unconfined")
Feb 27 14:21:21 jaiadityan-VirtualBox systemd[802]: Created slice apps.slice.
Feb 27 14:21:21 jaiadityan-VirtualBox systemd[802]: Created slice apps-org.gnome.Terminal.slice.
Feb 27 14:21:21 jaiadityan-VirtualBox systemd[802]: Starting GNOME Terminal Server...
Feb 27 14:21:21 jaiadityan-VirtualBox dbus-daemon[840]: [session uid=1000 pid=840] Successfully activated service 'org.gnome.Terminal'
Feb 27 14:21:21 jaiadityan-VirtualBox systemd[802]: Started GNOME Terminal Server.
Feb 27 14:21:21 jaiadityan-VirtualBox systemd[802]: Started VTE child process 1550 launched by gnome-terminal-server process 1542.
Feb 27 14:21:21 jaiadityan-VirtualBox systemd[802]: gnome-launched-org.gnome.Terminal.desktop-1537.scope: Succeeded.
Feb 27 14:21:23 jaiadityan-VirtualBox systemd[1]: system-hostnamed.service: Succeeded.
Feb 27 14:21:23 jaiadityan-VirtualBox systemd[1]: system-locale.service: Succeeded.
Feb 27 14:21:36 jaiadityan-VirtualBox tracker-store[1025]: OK
Feb 27 14:21:36 jaiadityan-VirtualBox systemd[802]: tracker-store.service: Succeeded.
Feb 27 14:21:52 jaiadityan-VirtualBox geoclue[1255]: Service not used for 60 seconds. Shutting down..
Feb 27 14:21:52 jaiadityan-VirtualBox systemd[1]: geoclue.service: Succeeded.
jaiadityanjaiadityan-VirtualBox:~$
```

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

4.1 Alphabetically

```
jaiadityan@jaiadityan-VirtualBox:~$ cat example | sort
17
36
46
a
a
a
d
i
i
j
n
t
y
```

4.2 Reverse order

```
jaiadityan@jaiadityan-VirtualBox:~$ cat example | sort -r
y
t
n
j
i
i
d
a
a
a
46
36
17
```

4.3 Numerical order

```
jaiadityan@jaiadityan-VirtualBox:~$ cat example | sort -n
a
a
a
d
i
i
j
n
t
y
17
36
46
```

5. 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?

```
jaiadityan@jaiadityan-VirtualBox:~$ cat example | sort | uniq
adi
aishu
alia
drake
jai
jhon
nate
nilla
```

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

- A. Read
- B. Write
- C. Execute