

# TASK-5

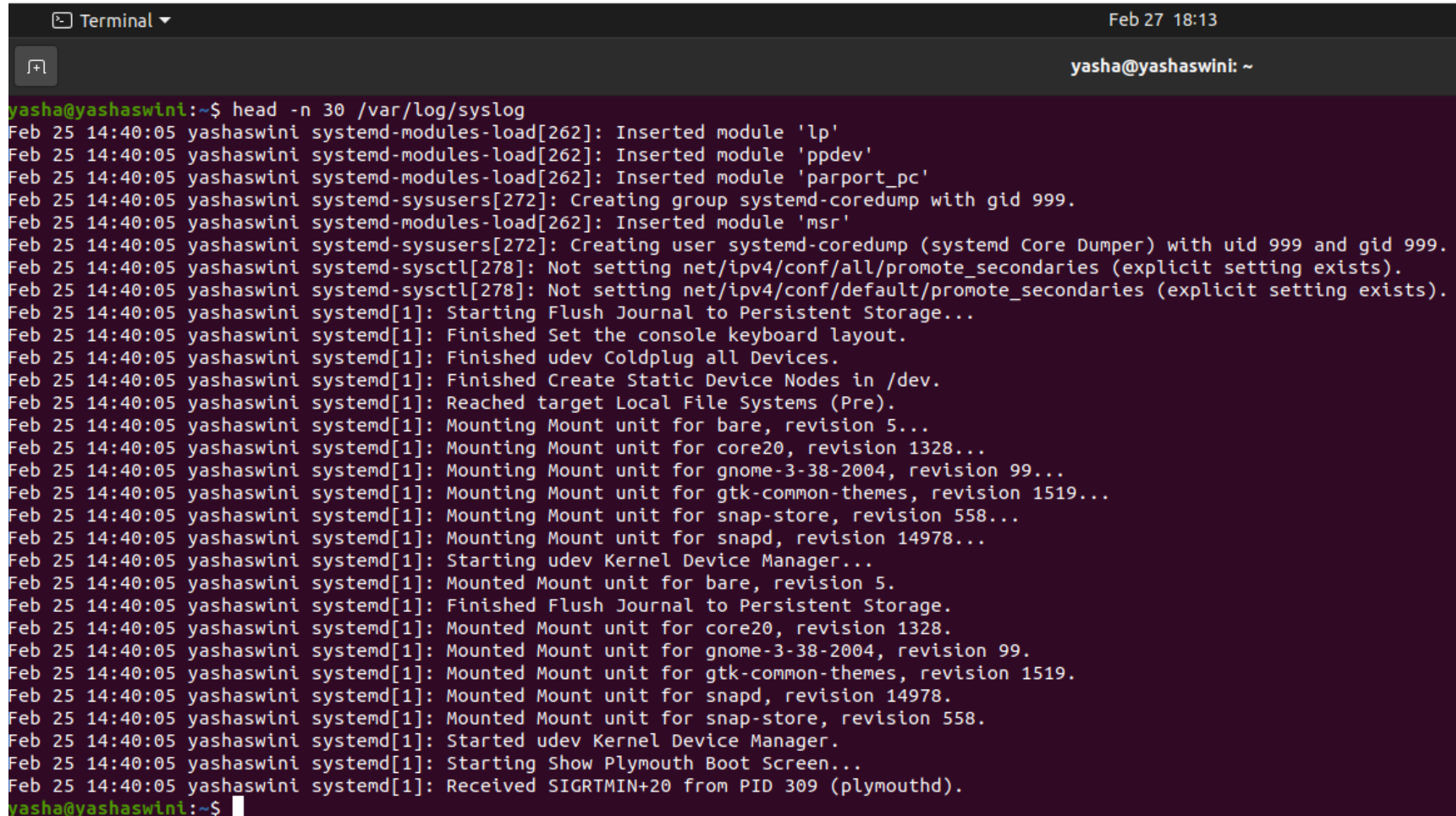
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Part-2

[illegible]

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

Command used : `head -n 30 /var/log/syslog`



The image shows a terminal window with a dark background. The title bar at the top says "Terminal" with a dropdown arrow. On the right side of the title bar, the date and time "Feb 27 18:13" are displayed. Below the title bar, there is a tab labeled "yasha@yashaswini: ~". The main area of the terminal shows a command prompt "yasha@yashaswini:~\$" followed by the command "head -n 30 /var/log/syslog". The output of the command is a list of 30 log entries from the syslog file, each starting with a timestamp "Feb 25 14:40:05" and a message from the systemd service. The messages include details about loading modules, creating users and groups, setting system properties, and mounting various filesystems.

```
yasha@yashaswini:~$ head -n 30 /var/log/syslog
Feb 25 14:40:05 yashaswini systemd-modules-load[262]: Inserted module 'lp'
Feb 25 14:40:05 yashaswini systemd-modules-load[262]: Inserted module 'ppdev'
Feb 25 14:40:05 yashaswini systemd-modules-load[262]: Inserted module 'parport_pc'
Feb 25 14:40:05 yashaswini systemd-sysusers[272]: Creating group systemd-coredump with gid 999.
Feb 25 14:40:05 yashaswini systemd-modules-load[262]: Inserted module 'msr'
Feb 25 14:40:05 yashaswini systemd-sysusers[272]: Creating user systemd-coredump (systemd Core Dumper) with uid 999 and gid 999.
Feb 25 14:40:05 yashaswini systemd-sysctl[278]: Not setting net/ipv4/conf/all/promote_secondaries (explicit setting exists).
Feb 25 14:40:05 yashaswini systemd-sysctl[278]: Not setting net/ipv4/conf/default/promote_secondaries (explicit setting exists).
Feb 25 14:40:05 yashaswini systemd[1]: Starting Flush Journal to Persistent Storage...
Feb 25 14:40:05 yashaswini systemd[1]: Finished Set the console keyboard layout.
Feb 25 14:40:05 yashaswini systemd[1]: Finished udev Coldplug all Devices.
Feb 25 14:40:05 yashaswini systemd[1]: Finished Create Static Device Nodes in /dev.
Feb 25 14:40:05 yashaswini systemd[1]: Reached target Local File Systems (Pre).
Feb 25 14:40:05 yashaswini systemd[1]: Mounting Mount unit for bare, revision 5...
Feb 25 14:40:05 yashaswini systemd[1]: Mounting Mount unit for core20, revision 1328...
Feb 25 14:40:05 yashaswini systemd[1]: Mounting Mount unit for gnome-3-38-2004, revision 99...
Feb 25 14:40:05 yashaswini systemd[1]: Mounting Mount unit for gtk-common-themes, revision 1519...
Feb 25 14:40:05 yashaswini systemd[1]: Mounting Mount unit for snap-store, revision 558...
Feb 25 14:40:05 yashaswini systemd[1]: Mounting Mount unit for snapd, revision 14978...
Feb 25 14:40:05 yashaswini systemd[1]: Starting udev Kernel Device Manager...
Feb 25 14:40:05 yashaswini systemd[1]: Mounted Mount unit for bare, revision 5.
Feb 25 14:40:05 yashaswini systemd[1]: Finished Flush Journal to Persistent Storage.
Feb 25 14:40:05 yashaswini systemd[1]: Mounted Mount unit for core20, revision 1328.
Feb 25 14:40:05 yashaswini systemd[1]: Mounted Mount unit for gnome-3-38-2004, revision 99.
Feb 25 14:40:05 yashaswini systemd[1]: Mounted Mount unit for gtk-common-themes, revision 1519.
Feb 25 14:40:05 yashaswini systemd[1]: Mounted Mount unit for snapd, revision 14978.
Feb 25 14:40:05 yashaswini systemd[1]: Mounted Mount unit for snap-store, revision 558.
Feb 25 14:40:05 yashaswini systemd[1]: Started udev Kernel Device Manager.
Feb 25 14:40:05 yashaswini systemd[1]: Starting Show Plymouth Boot Screen...
Feb 25 14:40:05 yashaswini systemd[1]: Received SIGRTMIN+20 from PID 309 (plymouthd).
yasha@yashaswini:~$
```

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

Command used : `tail -n 30 /var/log/syslog`

```
Terminal ▾ Feb 27 18:15
yasha@yashaswini: ~
yasha@yashaswini:~$ tail -n 30 /var/log/syslog
Feb 27 18:10:09 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 39 with keysym 39 (keycode 12).
Feb 27 18:10:09 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 34 with keysym 34 (keycode d).
Feb 27 18:10:09 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 35 with keysym 35 (keycode e).
Feb 27 18:10:09 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 36 with keysym 36 (keycode f).
Feb 27 18:10:09 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 37 with keysym 37 (keycode 10).
Feb 27 18:11:14 yashaswini gsd-color[1683]: unable to get EDID for xrandr-Virtual1: unable to get EDID for output
Feb 27 18:11:15 yashaswini gsd-color[1683]: message repeated 2 times: [ unable to get EDID for xrandr-Virtual1: unable to get EDID for output]
Feb 27 18:11:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 31 with keysym 31 (keycode a).
Feb 27 18:11:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 32 with keysym 32 (keycode b).
Feb 27 18:11:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 33 with keysym 33 (keycode c).
Feb 27 18:11:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 34 with keysym 34 (keycode d).
Feb 27 18:11:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 35 with keysym 35 (keycode e).
Feb 27 18:11:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 38 with keysym 38 (keycode 11).
Feb 27 18:11:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 39 with keysym 39 (keycode 12).
Feb 27 18:11:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 36 with keysym 36 (keycode f).
Feb 27 18:11:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 37 with keysym 37 (keycode 10).
Feb 27 18:11:15 yashaswini gsd-color[1683]: unable to get EDID for xrandr-Virtual1: unable to get EDID for output
Feb 27 18:12:15 yashaswini /usr/lib/gdm3/gdm-x-session[1372]: (EE) No surface to present from.
Feb 27 18:12:15 yashaswini gsd-color[1683]: unable to get EDID for xrandr-Virtual1: unable to get EDID for output
Feb 27 18:12:15 yashaswini gsd-color[1683]: message repeated 2 times: [ unable to get EDID for xrandr-Virtual1: unable to get EDID for output]
Feb 27 18:12:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 31 with keysym 31 (keycode a).
Feb 27 18:12:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 32 with keysym 32 (keycode b).
Feb 27 18:12:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 33 with keysym 33 (keycode c).
Feb 27 18:12:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 38 with keysym 38 (keycode 11).
Feb 27 18:12:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 39 with keysym 39 (keycode 12).
Feb 27 18:12:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 34 with keysym 34 (keycode d).
Feb 27 18:12:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 35 with keysym 35 (keycode e).
Feb 27 18:12:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 36 with keysym 36 (keycode f).
Feb 27 18:12:15 yashaswini gnome-shell[1556]: Window manager warning: Overwriting existing binding of keysym 37 with keysym 37 (keycode 10).
Feb 27 18:12:15 yashaswini gsd-color[1683]: unable to get EDID for xrandr-Virtual1: unable to get EDID for output
yasha@yashaswini:~$
```

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

Command used : sort filename

```
Terminal Feb 27 18:24 yasha@yashaswini: ~
yasha@yashaswini:~$ ls -a
.          Documents      Public
..         Downloads      .ssh
.bash_history .gnupg          .sudo_as_admin_successful
.bash_logout .local          Templates
.bashrc      Main_Directory .vboxclient-clipboard.pid
.cache       .mozilla        .vboxclient-display-svgx-x11.pid
.config      Music          .vboxclient-draganddrop.pid
demo         Pictures       .vboxclient-seamless.pid
Desktop      .profile       Videos
yasha@yashaswini:~$ cat demo
burger
pizza
thick shake
taco
pani puri
samosa chat
pav bhaji
yasha@yashaswini:~$ sort demo
burger
pani puri
pav bhaji
pizza
samosa chat
taco
thick shake
yasha@yashaswini:~$
```

Command used : `sort -r filename`  
This command is used for reverse order

```
Terminal Feb 27 18:24 yasha@yashaswini: ~
yasha@yashaswini:~$ ls -la
.  .bash_history  .bashrc  .config  Desktop  Downloads  .local  .mozilla  Pictures  Public  .sudo_as_admin_successful  .vboxclient-clipboard.pid  .vboxclient-draganddrop.pid  Videos
.. .bash_logout  .cache    demo    Documents  .gnupg    Main_Directory  Music  .profile  .ssh  Templates  .vboxclient-display-svgx-x11.pid  .vboxclient-seamless.pid
yasha@yashaswini:~$ cat demo
burger
pizza
thick shake
taco
pani puri
samosa chat
pav bhaji
yasha@yashaswini:~$ sort -r demo
thick shake
taco
samosa chat
pizza
pav bhaji
pani puri
burger
yasha@yashaswini:~$
```



```
yasha@yashaswini:~$ ls -a
.          demo          .mozilla    .sudo_as_admin_successful
..         Desktop       Music       Templates
.bash_history Documents    numb        .vboxclient-clipboard.pid
.bash_logout Downloads   Pictures    .vboxclient-display-svga-x11.pid
.bashrc    .gnupg      .profile    .vboxclient-draganddrop.pid
.cache     .local      Public      .vboxclient-seamless.pid
.config    Main_Directory .ssh        Videos
yasha@yashaswini:~$ cat numb
```

```
25
34
67
56
89
09
17
```

```
yasha@yashaswini:~$ sort numb
```

```
09
17
25
34
56
67
89
```

```
yasha@yashaswini:~$ sort -r numb
```

```
89
67
56
34
25
17
09
```

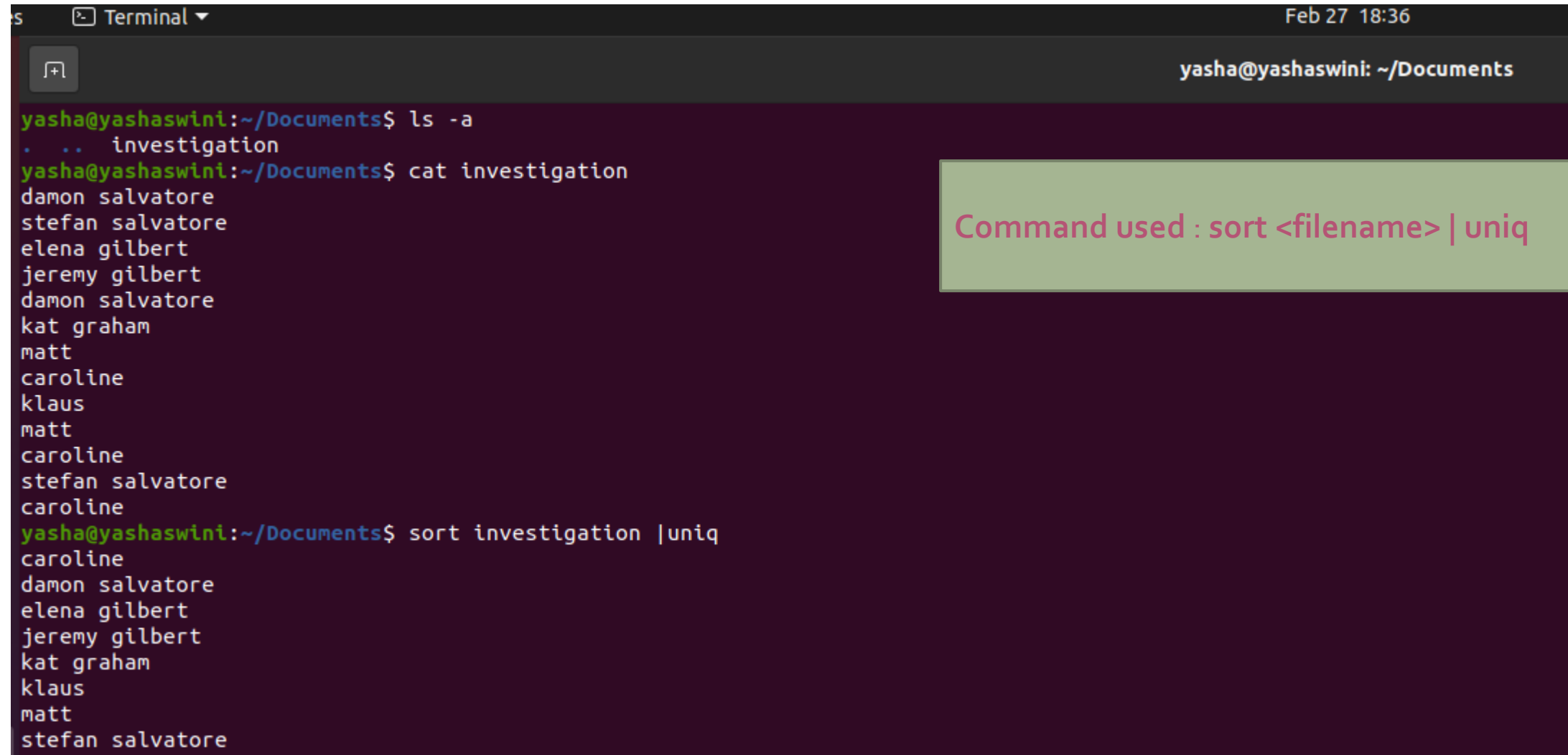
```
yasha@yashaswini:~$
```

Command used :  
sort filename &  
sort -r filename

Arranged in order

Arranged in reverse  
order

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?



The image shows a terminal window with a dark background. The title bar at the top says "Terminal" with a dropdown arrow and the date/time "Feb 27 18:36". The prompt is "yasha@yashaswini: ~/Documents". The user runs "ls -a" and lists the contents of the "investigation" directory. Then, they run "cat investigation" to display the list of names. Finally, they run "sort investigation | uniq" to sort and deduplicate the list.

```
yasha@yashaswini:~/Documents$ ls -a
.  ..  investigation
yasha@yashaswini:~/Documents$ cat investigation
damon salvatore
stefan salvatore
elena gilbert
jeremy gilbert
damon salvatore
kat graham
matt
caroline
klaus
matt
caroline
stefan salvatore
caroline
yasha@yashaswini:~/Documents$ sort investigation | uniq
caroline
damon salvatore
elena gilbert
jeremy gilbert
kat graham
klaus
matt
stefan salvatore
```

Command used : `sort <filename> | uniq`



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

Each permission level has three types of permission; **read, write and execute**. Permission type defines what a user can do with a particular object.

1. Read (r) : The read permission allows you to open and read the content of a file.
2. Write (w) : The write permission allows you to edit, remove or rename a file.
3. Execute (x): In Unix type system, you can't run or execute a program unless execute permission is set.