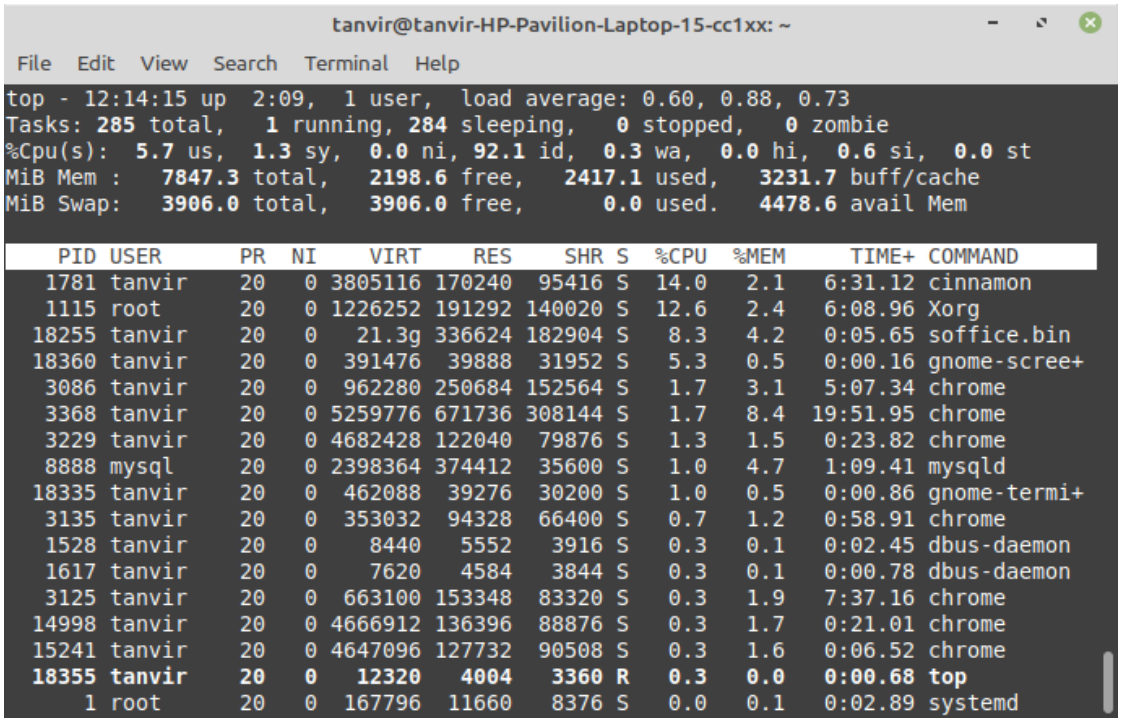
Lab 06 - Linux command for process

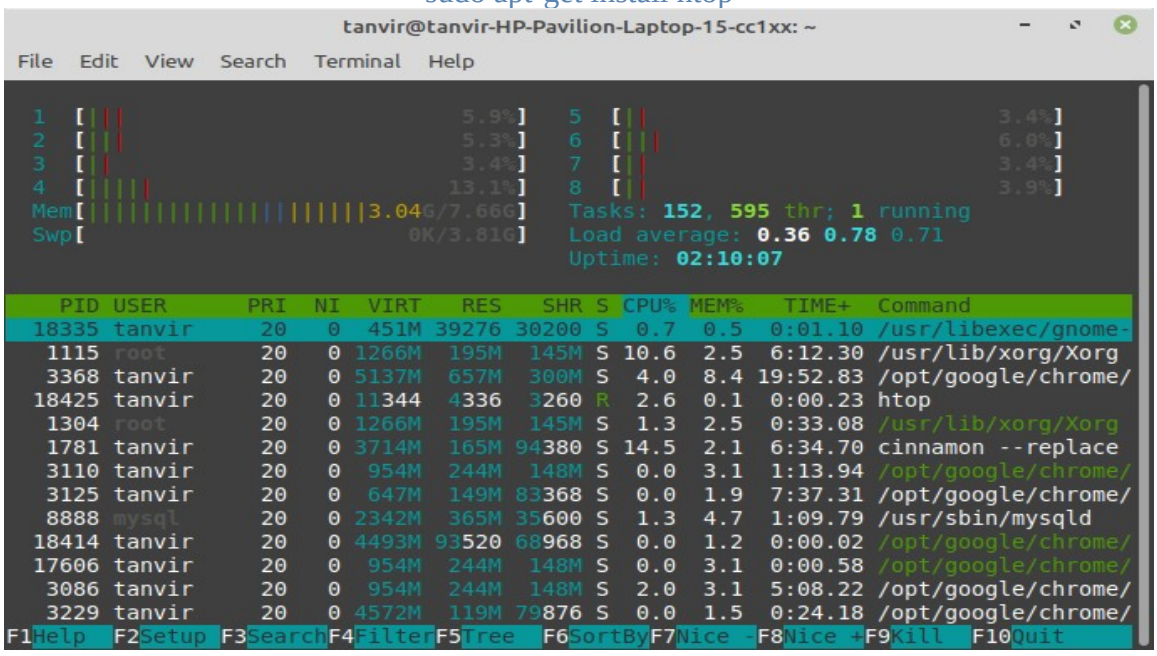
1) **top:** The top command is the traditional way to view your system's resource usage and see the processes that are taking up the most system resources. Top displays a list of processes, with the ones using the most CPU at the top.



To exit top or htop, use the Ctrl-C keyboard shortcut. This keyboard shortcut usually kills the currently running process in the terminal.

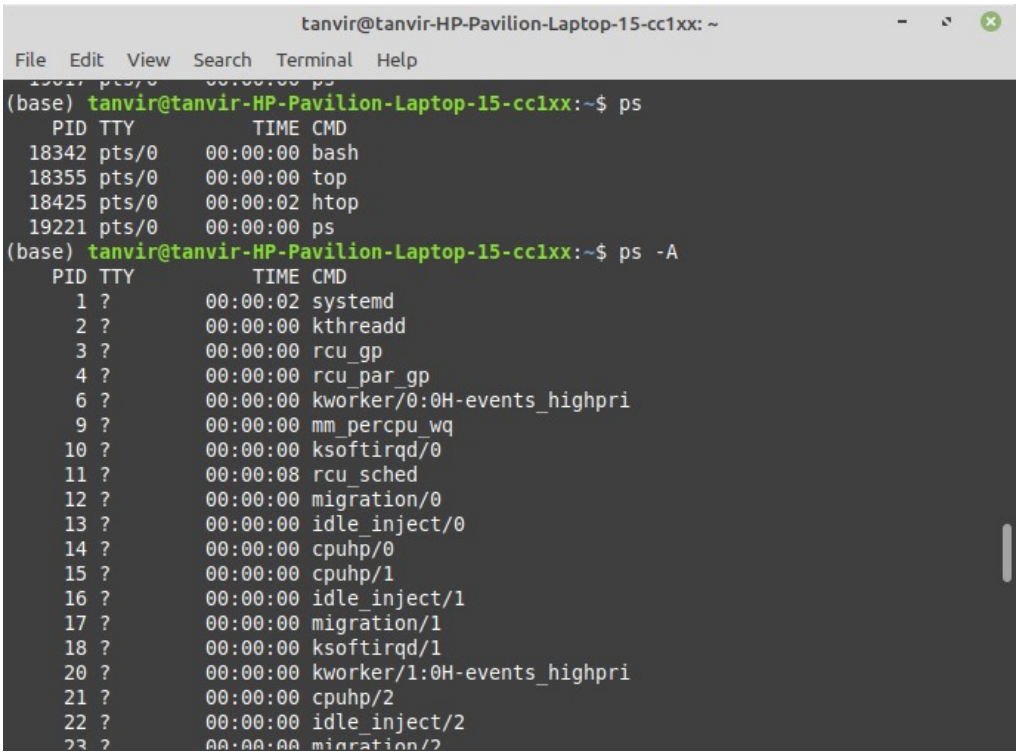
2) htop: The **htop** command is an improved top. It's not installed by default on most Linux distributions — here's the command you'll need to install it on Ubuntu:

```
sudo apt-get install htop
```



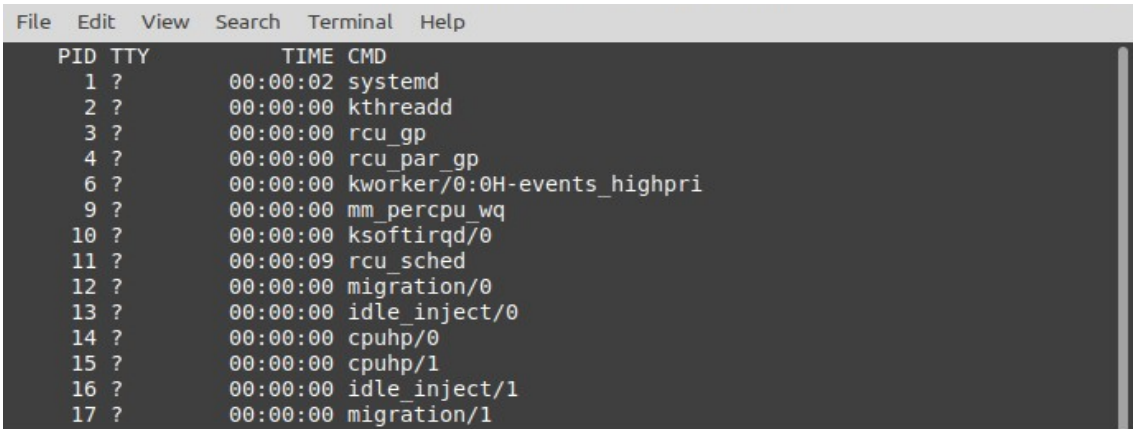
3) ps -A : The **ps** command lists running processes. The following command lists all processes running on your system:

ps -A



4) ps -A | less: ***ps -A*** may be too many processes to read at one time, so we can pipe the output through the **less** command to scroll through them at own pace.

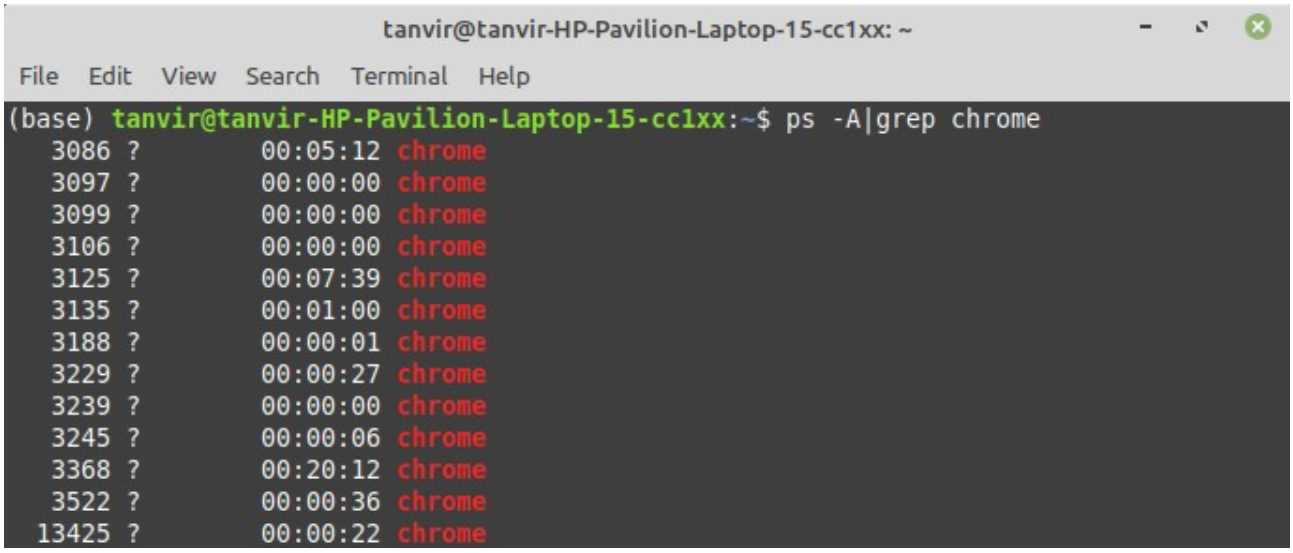
ps -A | less:



Press q to exit when you're done.

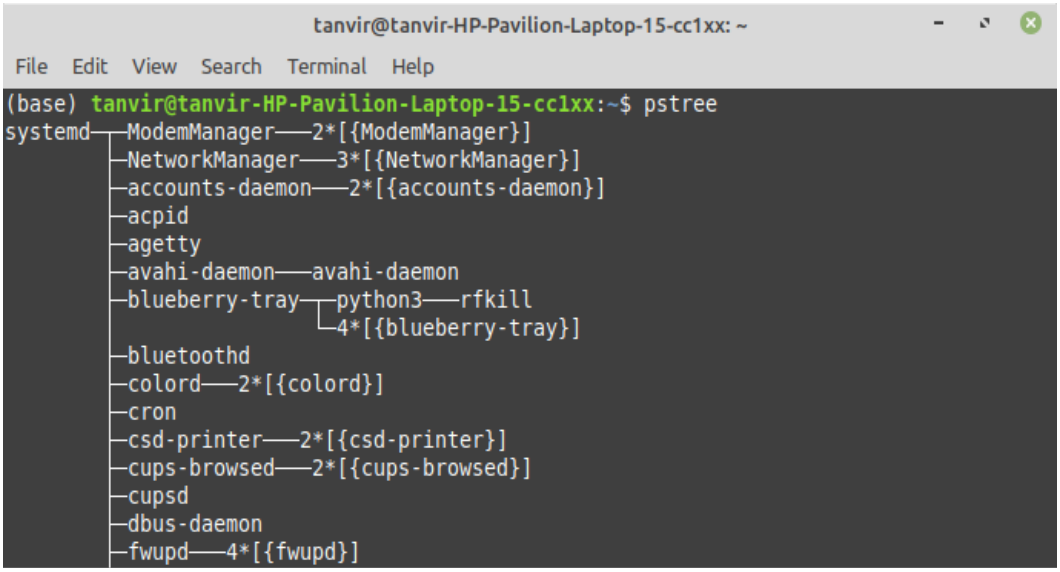
5) ps -A | grep : We could also pipe the output through **grep** to search for a specific process without using any other commands. The following command would search for the Firefox process:

ps -A | grep firefox



6) pstree:

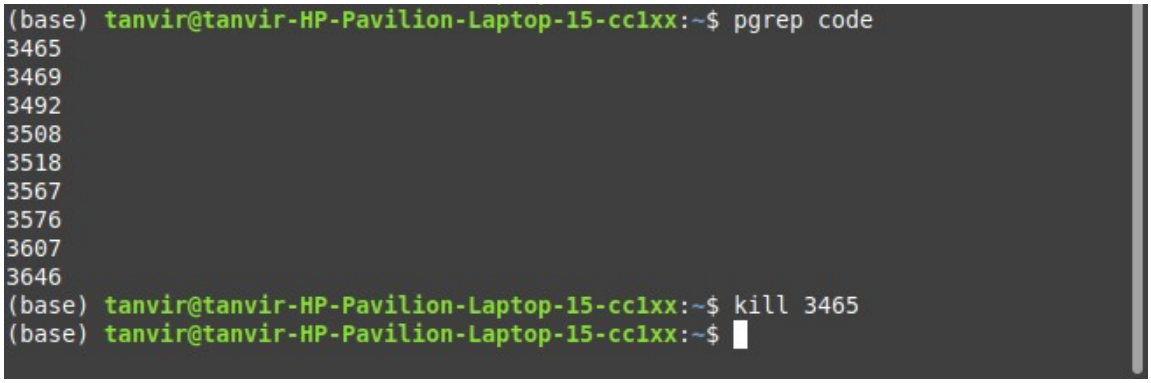
The **pstree** command is another way of visualizing processes. It displays them in tree format.



7) kill :

The **kill** command can kill a process, given its process ID. You can get this information from the **ps -A**, **top** or **pgrep** commands.

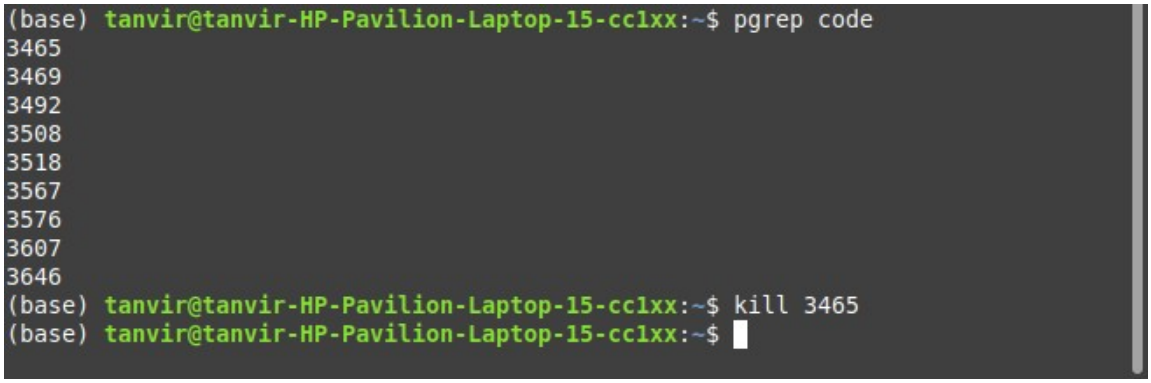
kill PID



8) pgrep :

Given a search term, **pgrep** returns the process IDs that match it. For example, you could use the following command to find Firefox's PID:

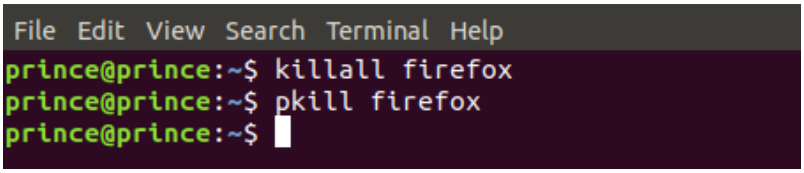
pgrep firefox



9) pkill & killall :

The **pkill** and **killall** commands can kill a process, given its name. Use either command to kill Firefox:

pkill firefox
killall firefox



10) renice:

The **renice** command changes the nice value of an already running process. The nice value determines what priority the process runs with. A value of **-19** is very high priority, while a value of **19** is very low priority. A value of **0** is the default priority.

The renice command requires a process's PID. The following command makes a process run with very low priority:

renice 19 *PID*