

Complete lab3 and lab4

8. State the initialization files of: sh, ksh, bash

1.sh

/etc/profile ~/. profile

2. ksh

/etc/profile ~/. profile

3. bash

/etc/profile	/etc/bash.bashrc	~/. profile
/etc/bash.bashrc	~/.bash_login	~/. bashrc

9. Edit in your profile to display date at login and change your prompt permanently

```
mohamed@dell: ~  
Wed Mar 12 01:12:39 PM EET 2025  
mohamed@dell:~$ su - mohamed  
Password:  
Wed Mar 12 01:13:00 PM EET 2025  
mohamed@dell:~$ |
```

1.List the user commands and redirect the output to /tmp/commands.list

```
mohamed@dell: ~  
mohamed@dell:~$ compgen -c > /tmp/commands.list  
mohamed@dell:~$ cat /tmp/commands.list  
alert  
egrep  
fgrep  
grep  
l  
la  
ll  
ls  
if  
then  
else  
elif  
fi
```

2. Count the number of user commands

```
mohamed@dell: ~  
mohamed@dell:~$ wc -l /tmp/commands.list  
3986 /tmp/commands.list  
mohamed@dell:~$ |
```

3. Get all the users names whose first character in their login is 'g'.

```
mohamed@dell:~$ sudo find /etc -name passwd -exec cat {} \; | grep '^g' | cut -d: -f1
games
geoclue
gnome-remote-desktop
gnome-initial-setup
gdm
```

4. Get the logins name and full names (comment) of logins starts with "g".

```
mohamed@dell:~$ sudo find /etc -name passwd -exec cat {} \; | grep '^g' | cut -d: -f1,5
games:games
geoclue:
gnome-remote-desktop:GNOME Remote Desktop
gnome-initial-setup:
gdm:Gnome Display Manager
mohamed@dell:~$ |
```

7. Display the number of users who is logged now to the system.

```
mohamed@dell:~$ who | wc -l
2
mohamed@dell:~$ |
```

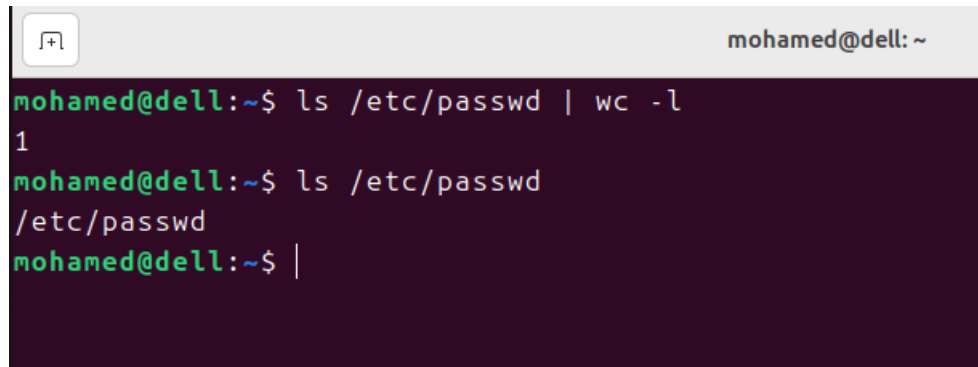
8. Display lines 7 to line 10 of /etc/passwd file

```
mohamed@dell:~$ sed -n '7,10p' /etc/passwd
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
mohamed@dell:~$ |
```

9. What happens if you execute:

- `cat filename1 | cat filename2 >` will not do anything useful because it won't receive anything from the first cat.
- `ls | rm >` this command may not delete anything because rm is receiving input through stdin and typically expects file arguments, not input through a pipe.

- `ls /etc/passwd | wc -l`



```
mohamed@dell: ~  
mohamed@dell:~$ ls /etc/passwd | wc -l  
1  
mohamed@dell:~$ ls /etc/passwd  
/etc/passwd  
mohamed@dell:~$ |
```

10. Issue the command sleep 100.

Can stop terminal for 100 seconds

11. Stop the last command

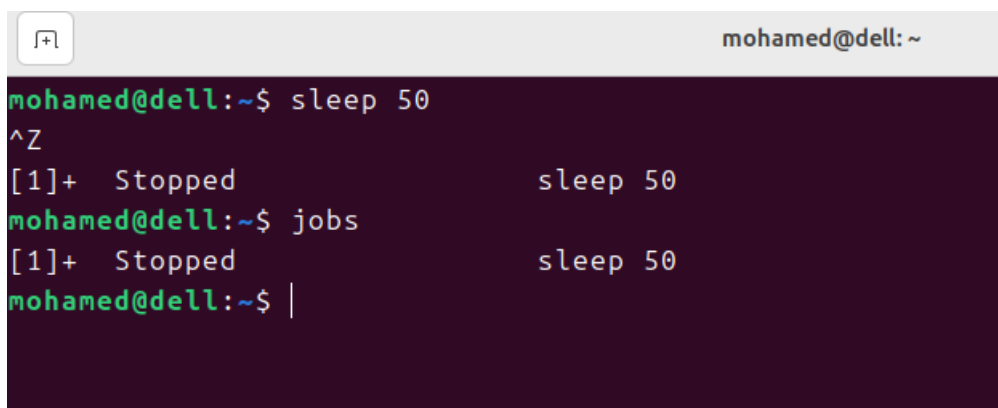
By using (**CTRL + z**)

12. Resume the last command in the background

By using (**gedit &**)

13. Issue the jobs command and see its output

displays a list of background jobs that are currently running in the shell.



```
mohamed@dell:~$ sleep 50  
^Z  
[1]+  Stopped                  sleep 50  
mohamed@dell:~$ jobs  
[1]+  Stopped                  sleep 50  
mohamed@dell:~$ |
```

14. Send the sleep command to the foreground and send it again to the background

For background > by using (**gedit &**)

For foreground > by using (**fg % job number**)

15. Kill the sleep command

By using **> kill -9 processes_id**

```
mohamed@dell: ~  
[1]- Killed sleep 50  
mohamed@dell:~$ |
```

16. Display your processes only

```
App Center mohamed@dell:~$ top -u $(whoami)  
top - 14:49:13 up 1:55, 1 user, load average: 0.05, 0.16, 0.19  
Tasks: 303 total, 1 running, 301 sleeping, 1 stopped, 0 zombie  
%Cpu(s): 0.2 us, 0.2 sy, 0.0 ni, 99.7 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st  
MiB Mem : 3866.7 total, 1127.8 free, 1253.4 used, 1763.1 buff/cache  
MiB Swap: 3741.0 total, 3741.0 free, 0.0 used. 2613.3 avail Mem  
  
PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND  
3000 mohamed 20 0 398044 8060 7036 S 0.3 0.2 0:00.45 gvfs-afc-volume  
2292 mohamed 20 0 21120 12620 9544 S 0.0 0.3 0:01.09 systemd  
2296 mohamed 20 0 21460 3676 1856 S 0.0 0.1 0:00.00 (sd-pam)  
2306 mohamed 9 -11 124512 15224 8988 S 0.0 0.4 0:20.85 pipewire  
2312 mohamed 20 0 106404 5772 5004 S 0.0 0.1 0:00.02 pipewire  
2316 mohamed 9 -11 415456 18512 13648 S 0.0 0.5 0:00.36 wireplumber  
2318 mohamed 9 -11 124672 13556 9484 S 0.0 0.3 0:00.24 pipewire-pulse  
2321 mohamed 20 0 11032 6756 4580 S 0.0 0.2 0:01.02 dbus-daemon  
2326 mohamed 20 0 325176 10148 9124 S 0.0 0.3 0:00.10 gnome-keyring-d  
2360 mohamed 20 0 693724 7420 6780 S 0.0 0.2 0:00.07 xdg-document-po  
2373 mohamed 20 0 317976 5956 5572 S 0.0 0.2 0:00.01 xdg-permission-  
2406 mohamed 20 0 244336 6044 5660 S 0.0 0.2 0:00.00 gdm-wayland-ses  
2411 mohamed 20 0 306876 16632 14712 S 0.0 0.4 0:00.04 gnome-session-b  
2479 mohamed 20 0 162652 6824 6184 S 0.0 0.2 0:00.01 gcr-ssh-agent
```

17. Display all processes except yours

```
mohamed@dell:~$ pgrep -v -a -u $(whoami)  
1 /sbin/init splash  
2 [kthreadd]  
3 [pool_workqueue_release]  
4 [kworker/R-rcu_gp]  
5 [kworker/R-sync_wq]  
6 [kworker/R-slub_flushwq]  
7 [kworker/R-netns]  
10 [kworker/0:0H-events_highpri]  
11 [kworker/u512:0-ipv6_addrconf]  
12 [kworker/R-mm_percpu_wq]  
13 [rcu_tasks_kthread]  
14 [rcu_tasks_rude_kthread]  
15 [rcu_tasks_trace_kthread]  
16 [ksoftirqd/0]  
17 [rcu_preempt]  
18 [rcu_exp_par_gp_kthread_worker/1]  
19 [rcu_exp_gp_kthread_worker]  
20 [migration/0]
```

18. Use the pgrep command to list your processes only

```
mohamed@dell:~$ pgrep -u $(whoami)
2292
2296
2306
2312
2316
2318
2321
2326
2360
2373
2406
2411
```

19. Kill your processes only.

By using > **pkill -u \$(whoami)**

This appeared after killing my processes

