

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

```
ubuntu@ubuntu:~$ ls /usr/bin > /tmp/commands.list
```

2. Count the number of user commands

```
ubuntu@ubuntu:~$ wc -l /tmp/commands.list
1415 /tmp/commands.list
```

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

```
ubuntu@ubuntu:~$ cut -d: -f1 /etc/passwd |grep ^g
games
geoclue
gnome-remote-desktop
gnome-initial-setup
gdm
```

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

```
ubuntu@ubuntu:~$ cut -f1,5 -d: /etc/passwd | grep ^g
games:games
geoclue:
gnome-remote-desktop:GNOME Remote Desktop
gnome-initial-setup:
gdm:Gnome Display Manager
```

5. Save the output of the last command sorted by their full names in a file.

```
ubuntu@ubuntu:~$ cut -f1,5 -d: /etc/passwd | grep ^g | sort -t: -k2 > file6
ubuntu@ubuntu:~$ cat file6
geoclue:
gnome-initial-setup:
games:games
gdm:Gnome Display Manager
gnome-remote-desktop:GNOME Remote Desktop
```

6. Write two commands: first: to search for all files on the system that named .bash_profile.

- `find / -name .bash_profile 2>/dev/null`

Second: sorts the output of ls command on / recursively, Saving their output and error in 2 different files and sending them to the background.

- `ls -R / 2> error | sort > file2&`

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

```
ubuntu@ubuntu:~$ users | wc -w
2
```

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

- `head -10 /etc/passwd | tail -4`

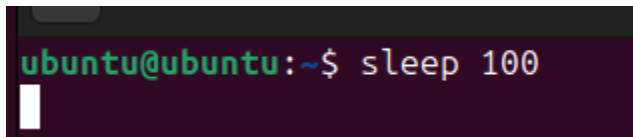
9. What happens if you execute: `cat filename1 | cat filename2 ls | rm ls /etc/passwd | wc -l`

- `cat f1 | cat f2` → Only shows f2 (pipe ignored).

`ls | rm` → Fails (rm needs direct arguments).

`ls /etc/passwd | wc -l` → Returns 1 which is wrong count

10. Issue the command `sleep 100`.

A terminal window with a dark background. The prompt is 'ubuntu@ubuntu:~\$' and the command 'sleep 100' has been entered. A white cursor is visible at the end of the command line.

```
ubuntu@ubuntu:~$ sleep 100
```

11. Stop the last command.

- `Ctrl + z`

12. Resume the last command in the background .

```

ubuntu@ubuntu:~$ sleep 20
^Z
[3]+  Stopped                  sleep 20
ubuntu@ubuntu:~$ bg %3
[3]+ sleep 20 &
ubuntu@ubuntu:~$ jobs
[1]-  Stopped                  sleep 100
[2]+  Stopped                  sleep 200
[3]   Running                  sleep 20 &
ubuntu@ubuntu:~$

```

13. Issue the jobs command and see its output

- jobs

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

- fg %3 and ctrl +z to stop it
- bg %3

15. Kill the sleep command.

```

ubuntu@ubuntu:~$ sleep 50 &
[4] 6368
[3]   Done                    sleep 20
ubuntu@ubuntu:~$ kill -KILL %4
ubuntu@ubuntu:~$ JOBS
JOBS: command not found
[4]   Killed                  sleep 50

```

16. Display your processes only .

- ps -u 1000
- ps -u \$(whoami)

17. Display all processes except yours .

```
-ps -e -u $(whoami)
```

18. Use the pgrep command to list your processes only

```
-pgrep -u $(whoami) -l
```

19. Kill your processes only.

```
- pkill -u $(whoami)
```