

LAB4

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

```
[student@workstation ~]$ cat /etc/passwd > /tmp/commands.list
[student@workstation ~]$ cat /tmp/commands.list
```

2. Count the number of user commands

```
[student@workstation ~]$ wc -l /etc/passwd
46 /etc/passwd
```

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

```
[student@workstation ~]$ grep ^g /etc/passwd
games:x:12:100:games:/usr/games:/sbin/nologin
geoclue:x:987:985:User for geoclue:/var/lib/geoclue:/sbin/nologin
gdm:x:42:42::/var/lib/gdm:/sbin/nologin
gnome-initial-setup:x:977:977::/run/gnome-initial-setup/:/sbin/nologin
```

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

```
[student@workstation ~]$ grep ^g /etc/passwd | cut -d: -f1,5
games:games
geoclue:User for geoclue
gdm:
gnome-initial-setup:
```

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

```
[student@workstation ~]$ grep ^g /etc/passwd | cut -d: -f1,5 > fullName.txt
[student@workstation ~]$ cat fullName
cat: fullName: No such file or directory
[student@workstation ~]$ cat fullName.txt
games:games
geoclue:User for geoclue
gdm:
gnome-initial-setup:
```

6. Write two commands: first: to search for all files on the system that named .bash_profile. Second: sorts the output of ls command on / recursively, Saving

```
[student@workstation ~]$ find / -type f -name ".bash_profile" 2>/dev/null  
/home/student/.bash_profile  
/home/marwan/.bash_profile  
/etc/skel/.bash_profile
```

```
[student@workstation ~]$ ls -lR / 2>error.txt |sort >t1.txt
```

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

```
[student@workstation ~]$ who | wc -l  
2
```

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

```
[student@workstation ~]$ head -n10 /etc/passwd | tail -n4  
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown  
halt:x:7:0:halt:/sbin:/sbin/halt  
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin  
operator:x:11:0:operator:/root:/sbin/nologin
```

9. What happens if you execute:

-cat filename1 | cat filename2

ignore file1 and show file2

-ls | rm

Not remove ls

- ls /etc/passwd | wc -l

output =>1

10. Issue the command sleep 100.

11. Stop the last command.

12. Resume the last command in the background

13. Issue the jobs command and see its output.

```
student@workstation:~$ sleep 100 ← 10
^C ← 11
student@workstation:~$ sleep 100& ← 12
[1] 2966
student@workstation:~$ jobs ← 13
[1]+  Running                  sleep 100 &
```

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

```
[student@workstation:~]$ fg %1
sleep 100
^C
```

15. Kill the sleep command.

```
[student@workstation:~]$ sleep 100&
[1] 3084
[student@workstation:~]$ kill 3084
[1]+ Terminated                 sleep 100
```

16. Display your processes only

```
[student@workstation:~]$ ps -u
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START  TIME COMMAND
student    1281  0.0  0.1 378108  8668 tty2      Ssl+ 11:39  0:00 /usr/libexec/
student    1283  0.1  1.2 809532  70180 tty2      Sl+  11:39  0:04 /usr/libexec/
student    1533  0.0  0.3 513580  21212 tty2      Sl+  11:39  0:00 /usr/libexec/
student    3048  0.0  0.1 225096   6132 pts/0     Ss   12:28  0:00 bash
student    3094  0.0  0.0 225920   3588 pts/0     R+  12:31  0:00 ps -u
```

17. Display all processes except yours

```
[student@workstation:~]$ ps aux | grep -v $USER
```

18. Use the pgrep command to list your processes only

```
[student@workstation ~]$ ps aux | grep -i $USER
```

19.Kill your processes only.

```
[student@workstation ~]$ pkill -u $USER
```