

## -Lab 4

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

```
mai@Ubuntu:~$ ls /bin > /tmp/commands.list  
mai@Ubuntu:~$ S
```

- 2- Count the number of user commands .

```
mai@Ubuntu:~$ wc -l /tmp/commands.list  
1472 /tmp/commands.list  
mai@Ubuntu:~$
```

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

```
mai@Ubuntu:~$ cat /etc/passwd | grep "^g"  
games:x:5:60:games:/usr/games:/usr/sbin/nologin  
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin  
geoclue:x:124:131:/:/var/lib/geoclue:/usr/sbin/nologin  
gnome-initial-setup:x:126:65534:/:/run/gnome-initial-setup:/bin/false  
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
```

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

```
mai@Ubuntu: ~ 80x38  
mai@Ubuntu:~$ grep "^g" /etc/passwd | cut -f1,5 -d:  
games:games  
gnats:Gnats Bug-Reporting System (admin)  
geoclue:  
gnome-initial-setup:  
gdm:Gnome Display Manager
```

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

```
mai@Ubuntu:~$ grep "^g" /etc/passwd | cut -f1,5 -d:> f11
mai@Ubuntu:~$ sudo sort -k1 -t : ~/f11
[sudo] password for mai:
games:games
gdm:Gnome Display Manager
geoclue:
gnats:Gnats Bug-Reporting System (admin)
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 their output and error in 2 different files and sending them to the background.

Find / -name .bash\_profile .

Ls -rR / | sort 0t/ -k2 > /tmp/output.txt 2> tmp/error.txt

- 7- Display the number of users who is logged now to the system: who | wc -l  
8- Display lines 7 to line 10 of /etc/passwd file : sed -n '7,10' etc/passwd  
9- What happens if you execute:

- cat filename1 | cat filename : list the content of filename 1 and filename 2 at the same line.
- ls | rm : list the content of the directory, rm removes the file
- ls /etc/passwd | wc -l: list and count the contents of file passwd

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.

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

15- Kill the sleep command.

```

mai@Ubuntu:~$ sleep 100
^Z
[1]+  Stopped                  sleep 100
mai@Ubuntu:~$ kill -cont %1
mai@Ubuntu:~$ jobs
[1]+  Running                  sleep 100 &
mai@Ubuntu:~$ fg %1
sleep 100
^Z
[1]+  Stopped                  sleep 100
mai@Ubuntu:~$ bg %1
[1]+ sleep 100 &
mai@Ubuntu:~$ kill -kill %1
[1]+  Killed                   sleep 100

```

16- Display your processes only

```

mai@Ubuntu:~$ ps
  PID TTY          TIME CMD
 19613 pts/0        00:00:00 bash
 19638 pts/0        00:00:00 ps
mai@Ubuntu:~$

```

17- Display all processes except yours

```

mai@Ubuntu:~$ ps -a
  PID TTY          TIME CMD
   843 tty2        00:00:00 gnome-session-b
 19641 pts/0        00:00:00 ps
mai@Ubuntu:~$

```

18- Use the pgrep command to list your processes only

```
mai@Ubuntu:~$ pgrep -u mai
782
783
790
792
793
795
800
807
827
835
843
845
862
909
923
941
950
965
966
972
978
```

19- .Kill your processes only.

Pkill -u