

## Lap 5:

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

```
[ghada@localhost ~]$ history > /tmp/commands.list
[ghada@localhost ~]$ ls
cv      docs      Downloads  myteam    oldpasswd  Public    Videos
Desktop Documents Music      noPermission Pictures    Templates
[ghada@localhost ~]$ cat /tmp/commands.list
 1  uname
 2  uname -a
 3  uname -n
 4  ls
 5  cd Desktop
 6  cat
 7  ls
 8  cd /
 9  ks
10  ls /
11  cd /root
12  cd root
```

2. Count the number of user commands

```
[ghada@localhost ~]$ wc -l /tmp/commands.list
130 /tmp/commands.list
```

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

```
[ghada@localhost ~]$ grep '^g' /etc/passwd | cut -f1 -d :
games
geoclue
gdm
gnome-initial-setup
ghada
```

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

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

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

```
[ghada@localhost ~]$ grep '^g' /etc/passwd | cut -f1,5 -d : | sort -t : -k2 > sortByFullName.txt
[ghada@localhost ~]$ cat sortByFullName.txt
gdm:
gnome-initial-setup:
games:games
ghada:ghada
geoclue:User for geoclue
```

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

```
[ghada@localhost ~]$ find / -name '.bash_profile' 2> /dev/null
/etc/skel/.bash_profile
/home/ghada/.bash_profile
[ghada@localhost ~]$
```

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

```
[ghada@localhost ~]$ ls -R / >output.txt 2>error.txt &
[1] 3520
[ghada@localhost ~]$ jobs
[1]+  Exit 1                  ls --color=auto -R / > output.txt 2> error.txt
```

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

```
[ghada@localhost ~]$ who
ghada    seat0          2024-12-30 14:00 (login screen)
ghada    tty2            2024-12-30 14:00 (tty2)
[ghada@localhost ~]$ who | wc -l
2
```

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

```
[ghada@localhost ~]$ cat -n /etc/passwd | head -10 | tail -4
7 shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
8 halt:x:7:0:halt:/sbin:/sbin/halt
9 mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
10 operator:x:11:0:operator:/root:/sbin/nologin
```

9. What happens if you execute:

- `cat filename1 | cat filename2` the output of file1 will be passed to file2 as input but it will only display the contents of file2
- `ls | rm ->` list files and directories and pass them to rm as input but rm wants file name or directory name

```
/etc/passwd
[ghada@localhost ~]$ ls |rm
rm: missing operand
Try 'rm --help' for more information.
```

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

```
[ghada@localhost ~]$ ls /etc/passwd
/etc/passwd
[ghada@localhost ~]$ ls /etc/passwd | wc -l
1
```