

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

```
ls /usr/bin > tmp/commands.list
```

2)Count the number of user commands

```
nareman@nareman-Inspiron-3521:~$ ls /usr/bin | wc -l
1367
```

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

```
nareman@nareman-Inspiron-3521:~$ grep ^g /etc/passwd | cut -f1 -d: |more
games
gnats
geoclue
gnome-initial-setup
gdm
```

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

```
nareman@nareman-Inspiron-3521:~$ grep ^g /etc/passwd | cut -f1,5 -d: |more
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.

```
nareman@nareman-Inspiron-3521:~$ grep ^g /etc/passwd | cut -f1,5 -d: >file1
nareman@nareman-Inspiron-3521:~$ cat file1
games:games
gnats:Gnats Bug-Reporting System (admin)
geoclue:
gnome-initial-setup:
gdm:Gnome Display Manager
```

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.

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

```
nareman@nareman-Inspiron-3521:~$ users
nareman
```

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

```
nareman@nareman-Inspiron-3521:~$ 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
nareman@nareman-Inspiron-3521:~$
```

9. What happens if you execute:

```
cat filename1 | cat filename2
```

Ans show content of filename2 but he opened filename1 but didn't see in final result

```
ls | rm
```

Ans: rm missing operand

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

Ans: list passwd file and count the line numbers

10. Issue the command sleep 100.

```
sleep 100
```

11. Stop the last command.

```
ctrl+z
```

12. Resume the last command in the background

```
nareman@nareman-Inspiron-3521:~$ bg %1
[1]+  sleep 100 &
nareman@nareman-Inspiron-3521:~$
[1]+  Done                  sleep 100
```

13. Issue the jobs command and see its output.

```
nareman@nareman-Inspiron-3521:~$ jobs
[1]+  Stopped                  sleep 100
```