

PART 1

In order to make the exercises, we will need to create a file just like in the following picture.

```
ignacio@ignacio-VirtualBox:~$ cat > awards.txt
JESSE#EISENBERG#THE SOCIAL NETWORK#ACTOR
COLIN#FIRTH#THE KING'S SPEECH#ACTOR
HALLE#BERRY#FRANKIE AND ALICE#ACTRESS
NATALIE#PORTMAN#BLACK SWAN#ACTRESS
DARREN#FINCHER#THE SOCIAL NETWORK#DIRECTOR
ANNETE#BENING#THE KIDS ARE ALRIGHT#ACTRESS
ignacio@ignacio-VirtualBox:~$ cat awards
cat: awards: No such file or directory
ignacio@ignacio-VirtualBox:~$ cat awards.txt
JESSE#EISENBERG#THE SOCIAL NETWORK#ACTOR
COLIN#FIRTH#THE KING'S SPEECH#ACTOR
HALLE#BERRY#FRANKIE AND ALICE#ACTRESS
NATALIE#PORTMAN#BLACK SWAN#ACTRESS
DARREN#FINCHER#THE SOCIAL NETWORK#DIRECTOR
ANNETE#BENING#THE KIDS ARE ALRIGHT#ACTRESS
ignacio@ignacio-VirtualBox:~$
```

1. By using the **echo** “new_line” >> my_file.txt we will be able to add a new line.

```
ignacio@ignacio-VirtualBox:~$ echo "CRHISTOPHER#NOLAN#INCEPTION#DIRECTOR" >> awards.txt
ignacio@ignacio-VirtualBox:~$ cat awards.txt
JESSE#EISENBERG#THE SOCIAL NETWORK#ACTOR
COLIN#FIRTH#THE KING'S SPEECH#ACTOR
HALLE#BERRY#FRANKIE AND ALICE#ACTRESS
NATALIE#PORTMAN#BLACK SWAN#ACTRESS
DARREN#FINCHER#THE SOCIAL NETWORK#DIRECTOR
ANNETE#BENING#THE KIDS ARE ALRIGHT#ACTRESS
CRHISTOPHER#NOLAN#INCEPTION#DIRECTOR
ignacio@ignacio-VirtualBox:~$
```

2. Now, we create a new file named “actors” with the name of the actors. We will use the same method as at the start with the **grep** command.

```
ignacio@ignacio-VirtualBox:~$ cat actors.txt
JESSE
COLIN
HALLE
NATALIE
DARREN
ANNETE
ignacio@ignacio-VirtualBox:~$
```

3. By using the **ls -d a*** command we will be able to display all the files in the home directory starting with a.

```
ignacio@ignacio-VirtualBox:~$ ls -d a*
actors.txt  awards.txt
ignacio@ignacio-VirtualBox:~$
```

4. By using the **grep** command we will be able to create a new file.

```
ignacio@ignacio-VirtualBox:~$ cat directors.txt
CHRISTOPHER
ignacio@ignacio-VirtualBox:~$
```

5. By using the **grep -n ACTRESS awards.txt** we will be able to display all the lines containing "ACTRESS" in the awards.txt file. Using -n after grep shows the line numbers.

```
ignacio@ignacio-VirtualBox:~$ grep -n ACTRESS awards.txt
3:HALLE#BERRY#FRANKIE AND ALICE#ACTRESS
4:NATALIE#PORTMAN#BLACK SWAN#ACTRESS
6:ANNETE#BENING#THE KIDS ARE ALRIGHT#ACTRESS
ignacio@ignacio-VirtualBox:~$
```

6. By using the **-v** parameter we will display the non-matching lines.

```
ignacio@ignacio-VirtualBox:~$ grep -v DIRECTOR awards.txt
JESSE#EISENBERG#THE SOCIAL NETWORK#ACTOR
COLIN#FIRTH#THE KING'S SPEECH#ACTOR
HALLE#BERRY#FRANKIE AND ALICE#ACTRESS
NATALIE#PORTMAN#BLACK SWAN#ACTRESS
ANNETE#BENING#THE KIDS ARE ALRIGHT#ACTRESS
ignacio@ignacio-VirtualBox:~$
```

PART 2

In order to proceed, we will need to create the people.txt file.

```
ignacio@ignacio-VirtualBox:~$ cat > people.txt
Ana;Perrrrrrrrales;1000
Pedro;Soria;1600
Jacinto;Manzano;500
Claudia;Pastor;600
Xavier;Granados;1000
Soraya;Annnnnnnneja;3000
Xavier;Guerra;4500
Sara;Siria;675
Pablo;Serrano;1000
Sonia;Mono;1600
ignacio@ignacio-VirtualBox:~$ cat people.txt
Ana;Perrrrrrrrales;1000
Pedro;Soria;1600
Jacinto;Manzano;500
Claudia;Pastor;600
Xavier;Granados;1000
Soraya;Annnnnnnneja;3000
Xavier;Guerra;4500
Sara;Siria;675
Pablo;Serrano;1000
Sonia;Mono;1600
ignacio@ignacio-VirtualBox:~$ █
```

7. Now, we create the people2.txt file with those who start their name with J or S using the **grep** command.

```
ignacio@ignacio-VirtualBox:~$ grep "^[J,S]" people.txt > people2.txt
ignacio@ignacio-VirtualBox:~$ cat people2.txt
Jacinto;Manzano;500
Soraya;Annnnnnnneja;3000
Sara;Siria;675
Sonia;Mono;1600
ignacio@ignacio-VirtualBox:~$
```

8. By using the following command, we will be able to copy all the lines not starting with S to from people.txt to people3.txt.

```
ignacio@ignacio-VirtualBox:~$ grep "^[^S]" people.txt > people3.txt
ignacio@ignacio-VirtualBox:~$ cat people3.txt
Ana;Perrrrrrrrales;1000
Pedro;Soria;1600
Jacinto;Manzano;500
Claudia;Pastor;600
Xavier;Granados;1000
Xavier;Guerra;4500
Pablo;Serrano;1000
ignacio@ignacio-VirtualBox:~$
```

9. By using the **grep** command we will be able to display said lines.

```
ignacio@ignacio-VirtualBox:~$ grep "^S" people.txt > people_s.txt
ignacio@ignacio-VirtualBox:~$ cat people_s.txt
Soraya;Annnnnnnneja;3000
Sara;Siria;675
Sonia;Mono;1600
ignacio@ignacio-VirtualBox:~$
```

10. By typing the “**-ic**” parameters we will be able to obtain the number of lines starting with “A”

```
ignacio@ignacio-VirtualBox:~$ grep -ic "^A" people.txt
1
ignacio@ignacio-VirtualBox:~$
```

11. By typing the following command we will be able to display how many people earn 1000\$ and not erase the people2.txt file.

```
ignacio@ignacio-VirtualBox:~$ grep -c "1000$" people.txt >> people2.txt
ignacio@ignacio-VirtualBox:~$ cat people2.txt
Jacinto;Manzano;500
Soraya;Annnnnnnneja;3000
Sara;Siria;675
Sonia;Mono;1600
3
ignacio@ignacio-VirtualBox:~$
```

12. By typing the following command, we will create a file called list, including the contents from the current directory.

```
Ignacio@Ignacio-VirtualBox:~$ ls -R > list
Ignacio@Ignacio-VirtualBox:~$
```

13. By typing **cat list** we will instantly get a complete list.

```
Ignacio@Ignacio-VirtualBox:~$ cat list
.:
actors.txt
awards.txt
Desktop
directors.txt
Documents
Downloads
list
Music
output
people
people2.txt
people3.txt
people_s.txt
people.txt
Pictures
Public
Templates
Videos

./Desktop:

./Documents:

./Downloads:

./Music:
```

By using **more list** we will get an incomplete list.

```
people.txt
Pictures
Public
Templates
Videos

./Desktop:

./Documents:

./Downloads:

./Music:

--More--(82%)
```

By using **less list** we will get a new interface. To exit this interface we will need to type **q** in the command line.

```
output
people
people2.txt
people3.txt
people_s.txt
people.txt
Pictures
Public
Templates
Videos

./Desktop:

./Documents:

./Downloads:

./Music:

list
```

14. By using the command **ls -r** we will print the contents of the current directory in reverse alphabetical order.

```
ignacio@ignacio-VirtualBox:~$ ls -r
Videos      Pictures    people3.txt output      Downloads   Desktop
Templates   people.txt  people2.txt Music        Documents   awards.txt
Public      people_s.txt people      list        directors.txt actors.txt
ignacio@ignacio-VirtualBox:~$
```

15. By typing the command **(ls -l \$HOME) > inform** we will create a file called **inform** containing the long format list of the files and directories in our home directory.

```
ignacio@ignacio-VirtualBox:~$ (ls -l $HOME) > inform
ignacio@ignacio-VirtualBox:~$ cat inform
total 68
-rw-rw-r-- 1 ignacio ignacio  40 dic  2 16:40 actors.txt
-rw-rw-r-- 1 ignacio ignacio 273 dic  2 16:39 awards.txt
drwxr-xr-x 2 ignacio ignacio 4096 dic  2 16:18 Desktop
-rw-rw-r-- 1 ignacio ignacio  12 dic  2 16:48 directors.txt
drwxr-xr-x 2 ignacio ignacio 4096 dic  2 16:18 Documents
drwxr-xr-x 2 ignacio ignacio 4096 dic  2 16:18 Downloads
-rw-rw-r-- 1 ignacio ignacio   0 dic  9 17:06 inform
-rw-rw-r-- 1 ignacio ignacio 272 dic  9 16:56 list
drwxr-xr-x 2 ignacio ignacio 4096 dic  2 16:18 Music
-rw-rw-r-- 1 ignacio ignacio  49 dic  9 16:14 output
-rw-rw-r-- 1 ignacio ignacio   0 dic  2 17:12 people
-rw-rw-r-- 1 ignacio ignacio  78 dic  9 16:53 people2.txt
-rw-rw-r-- 1 ignacio ignacio 138 dic  9 15:50 people3.txt
-rw-rw-r-- 1 ignacio ignacio  56 dic  9 16:51 people_s.txt
-rw-rw-r-- 1 ignacio ignacio 194 dic  2 17:02 people.txt
drwxr-xr-x 2 ignacio ignacio 4096 dic  2 16:18 Pictures
drwxr-xr-x 2 ignacio ignacio 4096 dic  2 16:18 Public
drwxr-xr-x 2 ignacio ignacio 4096 dic  2 16:18 Templates
drwxr-xr-x 2 ignacio ignacio 4096 dic  2 16:18 Videos
ignacio@ignacio-VirtualBox:~$
```

16. By typing the following command, we will find the word "FILE" in each file of the home directory.

```
ignacio@ignacio-VirtualBox:~$ grep -iwn "FILE" $HOME/* 2>/dev/null
/home/ignacio/test1:1:FILE
/home/ignacio/test2:1:FILE
ignacio@ignacio-VirtualBox:~$
```