

## LINUX: Exercises about files manipulation

### Part 1

Create a file called “awards” in your home directory, containing

```
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 ANNETTE#BENING#THE KIDS ARE  
ALRIGHT#ACTRESS
```

1. Add a new line, containing CHRISTOPHER#NOLAN#INCEPTION#DIRECTOR, at the end of the file. You should complete this exercise using commands instead of file editors.

```
student@student-VirtualBox:~$ cat >> awards  
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  
ANNETTE#BENING#THE KIDS ARE ALRIGHT#ACTRESS
```

```
student@student-VirtualBox:~$ cat >> awards  
CHRISTOPHER#NOLAN#INCEPTION#DIRECTOR  
student@student-VirtualBox:~$
```

2. Create a file called “actors” in which you only include ACTORS.

```
student@student-VirtualBox:~$ cat actors  
JESSE#EISENBERG#THE SOCIAL NETWORK#ACTOR  
COLIN#FIRTH#THE KING'S SPEECH#ACTOR
```

3. Display the files which begin with a in your home directory.

Other option `ls -d $HOME/a*`

`Ls $home | grep "^a"`

```
student@student-VirtualBox:~$ ls | grep ^a  
actors  
awards
```

4. Create a file called “directors” in which you only include DIRECTORS.

```
student@student-VirtualBox:~$ grep "#DIRECTOR$" awards > directors  
student@student-VirtualBox:~$ cat directors  
DARREN#FINCHER#THE SOCIAL NETWORK#DIRECTOR  
CHRISTOPHER#NOLAN#INCEPTION#DIRECTOR  
student@student-VirtualBox:~$
```

5. Display the lines of “awards” containing actresses. Show the line number.

`Grep -n "#ACTRESS$" awards`

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


## 6. Display the lines in "awards" which are not directors. Show the line number.

```
student@student-VirtualBox:~$ grep -v -n DIRECTOR awards
1:JESSE#EISENBERG#THE SOCIAL NETWORK#ACTOR COLIN#FIRTH#THE KING'S SPEECH#ACTOR
2:HALLE#BERRY#FRANKIE AND ALICE#ACTRESS NATALIE#PORTMAN#BLACK SWAN#ACTRESS
4:ALRIGHT#ACTRESS
```


## Part 2

### Create the file called "people.txt"

Ana;Perales;1000Pedro;Soria;1600Jacinto;Manzano;500 Claudia;Pastor;600 Xavier;Granados;1000  
Soraya;Annnnnnnneja;3000 Xavier;Guerra;4500 Sara;Siria;675 Pablo;Serrano;1000 Sonia;Mono;1600

 Windows 10 Client Hernán David Ortiz Jinez (Snapshot 1) [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities  Terminal ▾

```
student@student-VirtualBox:~$ cat >> people.txt
Ana;Perrrrrrrales;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
student@student-VirtualBox:~$
```

## 7. Create a file called "people2.txt", containing those people whose name begins with J or S.

grep "^S" people.txt > people2.txt

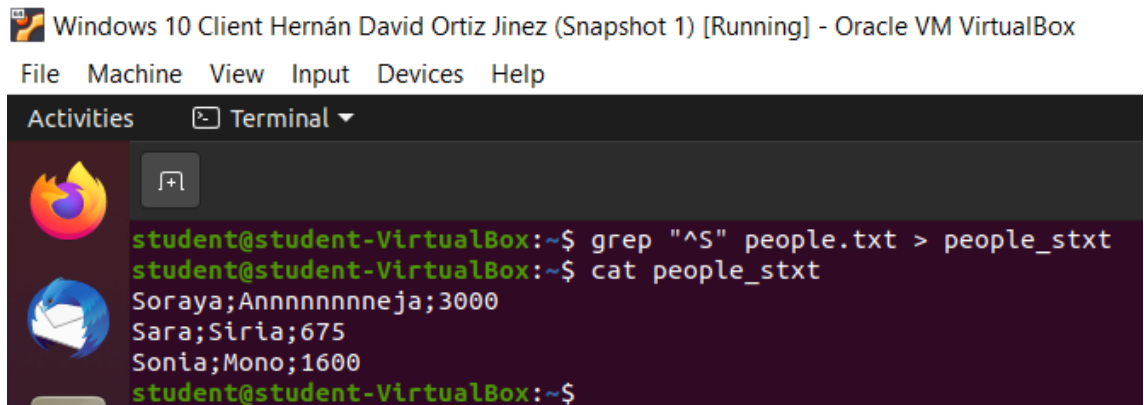
grep "^J" people.txt » people2.txt

```
student@student-VirtualBox:~$ grep "^J" people.txt > people2.txt
student@student-VirtualBox:~$ grep "^S" people.txt >> people2.txt
student@student-VirtualBox:~$
```

## 8. Create a file called "people3.txt", containing those people whose names do not begin with S

grep -v "^S" people.tx > people3.txt

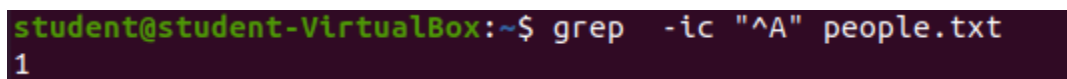
```
student@student-VirtualBox:~$ grep -v "^S" people.txt > people3.txt
student@student-VirtualBox:~$
```

**9. Display people whose name begin with S and redirect to file to "people\_s.txt"**

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

**10. Display the number of people whose name begins with A (case insensitive)**

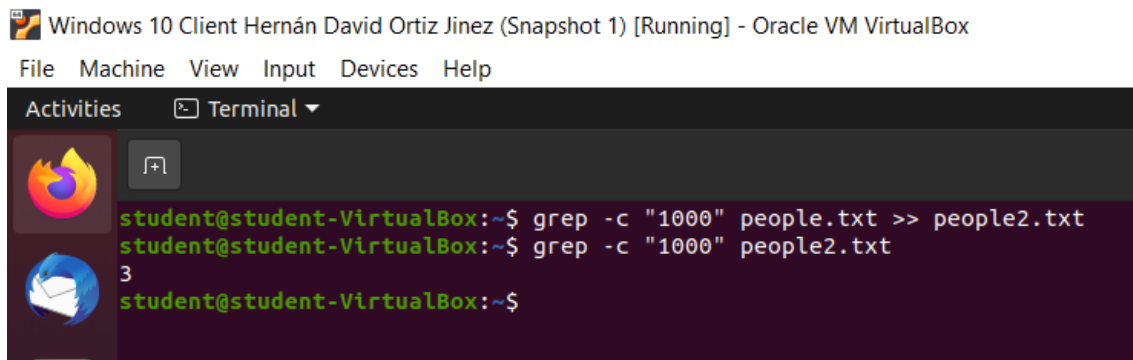
**grep -ic "A" people.txt**



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

**11. Display how many people earn 1000 and concatenate the result in people2.txt**

**grep -c 1000 people.txt » people2.txt**



```
student@student-VirtualBox:~$ grep -c "1000" people.txt >> people2.txt
student@student-VirtualBox:~$ grep -c "1000" people2.txt
3
student@student-VirtualBox:~$
```

**Part 3****12. Create a file called list, including the contents from the current directory**

**ls -R**

**13. Open the file to check if the content is right using cat, more and les and observe the differences.**

Cat command show all the content into list with no possibility of changing. With More command we can see all the content with the difference that we can see more lines using the space key. The Less command es the most usefull of all , this command does all of More does but you have the posibilidad to move forward and backward.

**14. Print the contents of the current directory in reverse alphabetical order.**

**ls -r**

```
student@student-VirtualBox:~$ ls -r
Videos  Templates  systems  Public  people.txt  people3.txt  Music  exercises  Documents  Desktop  awards  Africa
'<user>' teachers  snap    Pictures  people_s.txt  people2.txt  list  Downloads  directors  config  Asia  actors
```

15. Create a file called inform, containing the log format list of the files and directories in your home directory.

(ls -l \$HOME) > inform

```
student@student-VirtualBox:~$ (ls -l $HOME) > inform
student@student-VirtualBox:~$ cat inform
total 1216
-rw-rw-r-- 1 student student    79 dic 29 19:19 actors
drwxrwxr-x 4 student student  4096 dic 29 18:52 Africa
drwxrwxr-x 4 student student  4096 dic 29 18:52 Asia
-rw-rw-r-- 1 student student   277 dic 29 19:17 awards
drwxrwxr-x 2 student student  4096 nov  9 12:51 config
drwxr-xr-x 2 student student  4096 oct 24 17:20 Desktop
-rw-rw-r-- 1 student student    80 dic 29 19:25 directors
drwxr-xr-x 2 student student  4096 dic  9 18:04 Documents
drwxr-xr-x 2 student student  4096 oct 24 17:20 Downloads
drwxrwxr-x 4 student student  4096 dic 29 18:53 exercises
-rw-rw-r-- 1 student student     0 dic 29 20:08 inform
-rw-rw-r-- 1 student student 1147896 dic 29 19:46 list
drwxr-xr-x 2 student student  4096 oct 24 17:20 Music
-rw-rw-r-- 1 student student    78 dic 29 19:45 people2.txt
-rw-rw-r-- 1 student student   138 dic 29 19:40 people3.txt
-rw-rw-r-- 1 student student    56 dic 29 19:41 people_s.txt
-rw-rw-r-- 1 student student   194 dic 29 19:37 people.txt
drwxr-xr-x 2 student student  4096 oct 24 17:20 Pictures
drwxr-xr-x 2 student student  4096 oct 24 17:20 Public
drwx----- 5 student student  4096 dic 16 15:59 snap
drwxrwxr-x 4 student student  4096 dic 29 18:41 systems
drwxr-xr-x 2 root    root    4096 nov 17 12:39 teachers
drwxr-xr-x 2 student student  4096 oct 24 17:20 Templates
drwxrwxr-x 3 student student  4096 nov 18 12:04 <user>
drwxr-xr-x 2 student student  4096 oct 24 17:20 Videos
student@student-VirtualBox:~$
```

16. Find the Word FILE in each file of your home directory, ignoring case and showing the line number (create files containing this Word if you want any march).

```
student@student-VirtualBox:~$ echo FILE > $HOME/test1; echo FILE > $HOME/test2
student@student-VirtualBox:~$ grep -iwn "FILE" $HOME/*2>/dev/null
student@student-VirtualBox:~$
```