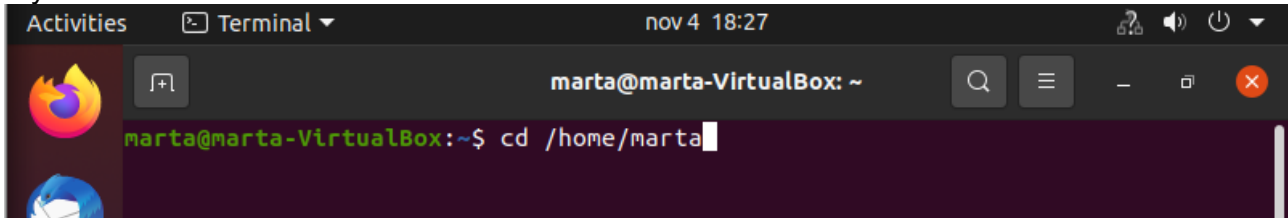


A. MANAGING DIRECTORIES

1. Change the current directory to */home/<user>*.

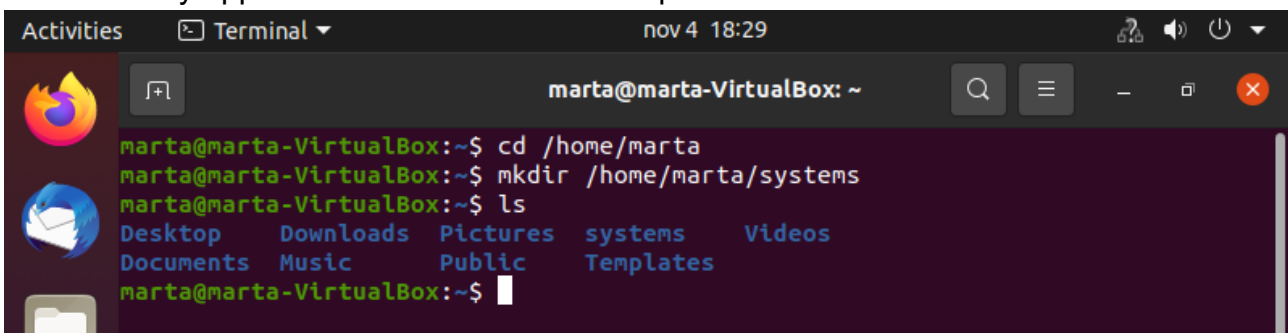
In Ubuntu, I opened the terminal and type `cd` to change to the directory that It's asked, with my user:



```
Activities  Terminal  nov 4 18:27
marta@marta-VirtualBox: ~
marta@marta-VirtualBox:~$ cd /home/marta
```

2. Create a directory called *systems*

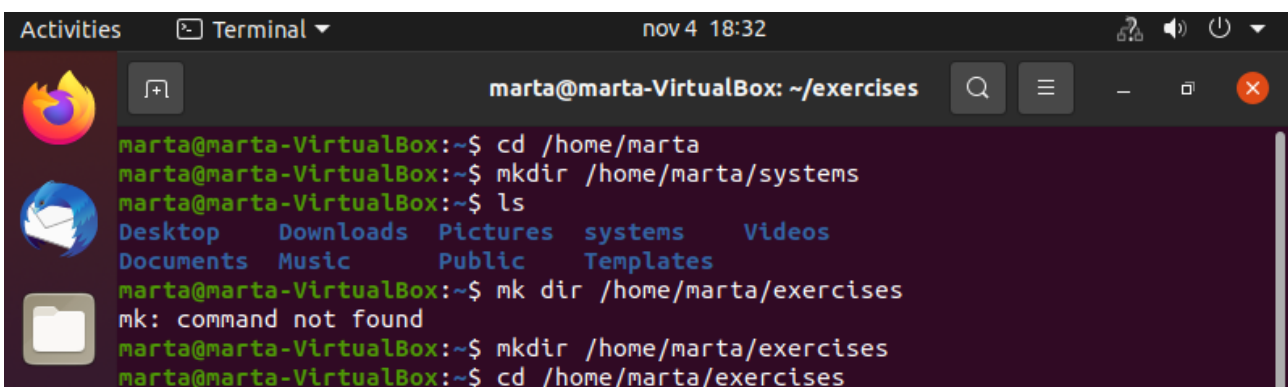
To do this, I type the parameter “`mkdir`” and, in my case, I have used an absolute path. The new directory appears when I execute the “`ls`” parameter:



```
Activities  Terminal  nov 4 18:29
marta@marta-VirtualBox: ~
marta@marta-VirtualBox:~$ cd /home/marta
marta@marta-VirtualBox:~$ mkdir /home/marta/systems
marta@marta-VirtualBox:~$ ls
Desktop  Downloads  Pictures  systems  Videos
Documents  Music  Public  Templates
marta@marta-VirtualBox:~$
```

3. Create a directory called *exercises*. Go to his directory and create another new directory called *programming*.

I create the directory called “*exercises*” with `mkdir` using absolute paths, and then I go through this new directory and make the same operation:



```
Activities  Terminal  nov 4 18:32
marta@marta-VirtualBox: ~/exercises
marta@marta-VirtualBox:~$ cd /home/marta
marta@marta-VirtualBox:~$ mkdir /home/marta/systems
marta@marta-VirtualBox:~$ ls
Desktop  Downloads  Pictures  systems  Videos
Documents  Music  Public  Templates
marta@marta-VirtualBox:~$ mk dir /home/marta/exercises
mk: command not found
marta@marta-VirtualBox:~$ mkdir /home/marta/exercises
marta@marta-VirtualBox:~$ cd /home/marta/exercises
```

4. Go back to the user's home directory. Delete the directories “*exercises*” and “*programming*” using just one command. Create the directories again with one command.

To delete a directory, I need to use the parameter “`rm`” with “`-rf`”, that's forces to remove all contents of the selected directory. Then, I use “`ls`” to see if I have delete the folder:

```
Rm - rf exercises
```

ls
ls exercises

```

marta@marta-VirtualBox: ~
marta@marta-VirtualBox:~$ ls
Desktop  Downloads  Music      Public     Templates
Documents exercises  Pictures   systems    Videos
marta@marta-VirtualBox:~$ rm -rf exercises
marta@marta-VirtualBox:~$ ls
Desktop  Downloads  Pictures   systems    Videos
Documents Music       Public     Templates
marta@marta-VirtualBox:~$ ls exercises
ls: cannot access 'exercises': No such file or directory
marta@marta-VirtualBox:~$ mkdir -p exercises/programming
marta@marta-VirtualBox:~$ ls
Desktop  Downloads  Music      Public     Templates
Documents exercises  Pictures   systems    Videos
marta@marta-VirtualBox:~$

```

5. Print the contents of the root directory

To do this, It's needed to write "ls /" or "tree" if it's possible. In my case, I have used "ls" plus the backslash (/) to indicate the root directory:

```

marta@marta-VirtualBox:~$ ls /
bin  cdrom  etc  lib  lib64  lost+found  mnt  proc  run  snap  sys  usr
boot  dev  home  lib32  libx32  media  opt  root  sbin  srv  tmp  var
marta@marta-VirtualBox:~$

```

6. Print all the files and directories that begin with d in the /usr/bin directory

To print all the files, I have to use "ls" and the files's routes I want to see:

ls /usr/bin/d*

```

marta@marta-VirtualBox:~$ ls /usr/bin/d*
/usr/bin/dash
/usr/bin/date
/usr/bin/dbus-cleanup-sockets
/usr/bin/dbus-daemon
/usr/bin/dbus-launch
/usr/bin/dbus-monitor
/usr/bin/dbus-run-session
/usr/bin/dbus-send
/usr/bin/dbus-update-activation-environment
/usr/bin/dbus-uuidgen
/usr/bin/dc
/usr/bin/dconf
/usr/bin/dd
/usr/bin/ddstddecode
/usr/bin/deallocvt
/usr/bin/debconf
/usr/bin/debconf-apt-progress
/usr/bin/debconf-daemon
/usr/bin/debconf-copydb
/usr/bin/debconf-escape
/usr/bin/debconf-set-selections
/usr/bin/debconf-show
/usr/bin/deb-systemd-helper
/usr/bin/deb-systemd-invoke
/usr/bin/deja-dup
/usr/bin/delpart
/usr/bin/delv
/usr/bin/desktop-file-edit
/usr/bin/desktop-file-install
/usr/bin/desktop-file-validate
/usr/bin/devdump
/usr/bin/df
/usr/bin/dfu-tool
/usr/bin/dh-bash-completion
/usr/bin/dh-installxhmlcatalogs
/usr/bin/dh-perl_openssl
/usr/bin/diff
/usr/bin/diff3
/usr/bin/dig
/usr/bin/dir
/usr/bin/dircolors
/usr/bin/dirmngr
/usr/bin/dirmngr-client
/usr/bin/dirname
/usr/bin/dirsplit
/usr/bin/dmmsg
/usr/bin/dnsdomainname
/usr/bin/domainname
/usr/bin/do-release-upgrade
/usr/bin/dpkg
/usr/bin/dpkg-deb
/usr/bin/dpkg-divert
/usr/bin/dpkg-maintscript-helper
/usr/bin/dpkg-query
/usr/bin/dpkg-split
/usr/bin/dpkg-statoverride
/usr/bin/dpkg-trigger
/usr/bin/driverless
/usr/bin/du
/usr/bin/dumpkeys
/usr/bin/duplicity
/usr/bin/dvipdf
marta@marta-VirtualBox:~$

```

7. List all the files and directories in /etc, including subdirectories

With `ls -R /etc`, I can get access to “/etc” and see all its hidden folders and subfolders:

```
marta@marta-VirtualBox:~$ ls -R /etc
/etc:
acpi                hdparm.conf        pnm2ppa.conf
adduser.conf        host.conf           polkit-1
alsa                hostid             popularity-contest.conf
alternatives        hostname           ppp
anacrontab          hosts              profile
apg.conf            hosts.allow        profile.d
apm                 hosts.deny         protocols
apparmor            hp                 pulse
apparmor.d          ifplugd            python3
appport             init               python3.8
appstream.conf      init.d             rc0.d
apt                 initramfs-tools   rc1.d
avahi                inputrc            rc2.d
bash.bashrc          insserv.conf.d     rc3.d
bash_completion     iproute2           rc4.d
bash_completion.d   issue              rc5.d
bindresvport.blacklist issue.net           rc6.d
binfmt.d             kernel             rcS.d
```

8. Create the empty files called student.txt, student1.txt, student2.txt, list, luggage and last in the directory named “systems”

As systems is already created, I use the command “touch” and create the rest of the empty files:

```
nov 10 17:46
marta@marta-VirtualBox: ~/systems
marta@marta-VirtualBox:~$ cd $HOME
marta@marta-VirtualBox:~$ mkdir systems
mkdir: cannot create directory 'systems': File exists
marta@marta-VirtualBox:~$ cd systems
marta@marta-VirtualBox:~/systems$ touch student.txt student1.txt student2.txt list luggage last
marta@marta-VirtualBox:~/systems$ ls
last list luggage student1.txt student2.txt student.txt
marta@marta-VirtualBox:~/systems$
```

9. Print all the files that begin with “l” in the directory “systems”

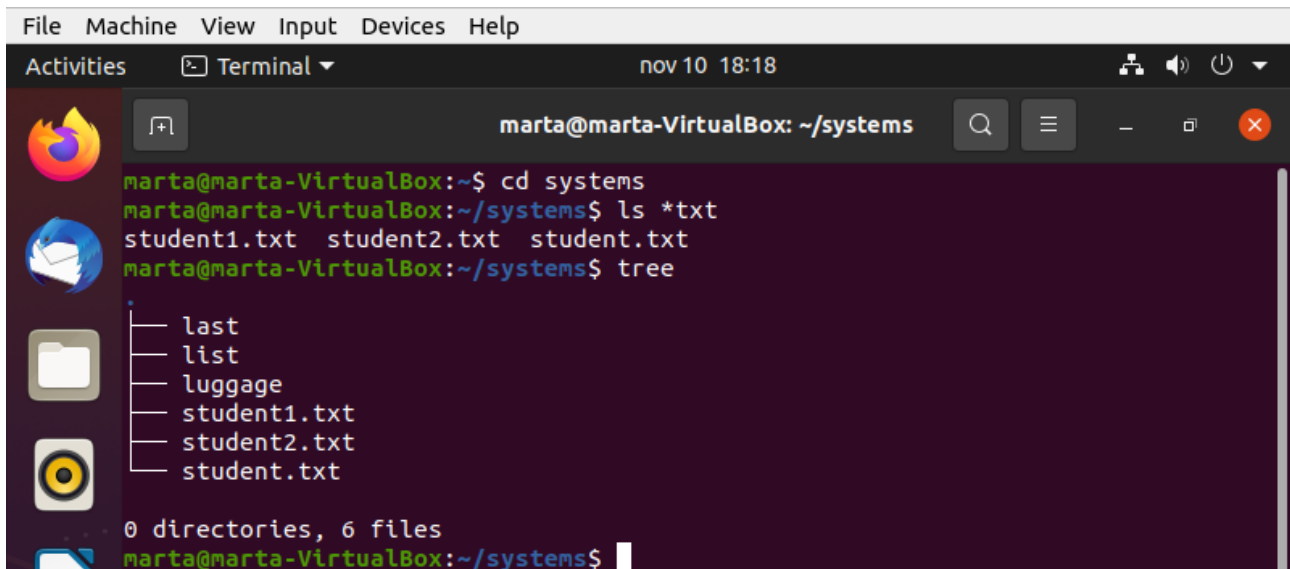
To print a specified group of files, I use the “*” and the “ls” command to indicate that I want to print the files that begins with “l”:

```
nov 10 17:48
marta@marta-VirtualBox: ~
marta@marta-VirtualBox:~/systems$ ls l*
last list luggage
marta@marta-VirtualBox:~/systems$ cd ..
marta@marta-VirtualBox:~$ ls systems/l*
systems/last systems/list systems/luggage
marta@marta-VirtualBox:~$
```

10. Print all the files that end with “txt” in the directory “systems”

As in the previous exercise, I indicate with “*” the extension of the files and “ls”:

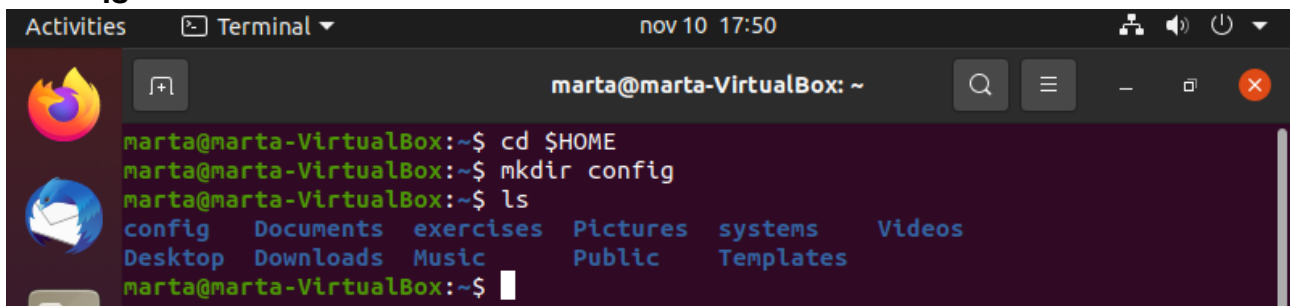
```
ls *txt
```



```
File Machine View Input Devices Help
Activities Terminal nov 10 18:18
marta@marta-VirtualBox: ~/systems
marta@marta-VirtualBox:~$ cd systems
marta@marta-VirtualBox:~/systems$ ls *txt
student1.txt student2.txt student.txt
marta@marta-VirtualBox:~/systems$ tree
.
├── last
├── list
├── luggage
├── student1.txt
├── student2.txt
└── student.txt
0 directories, 6 files
marta@marta-VirtualBox:~/systems$
```

11. Create a new directory into \$HOME called “config”

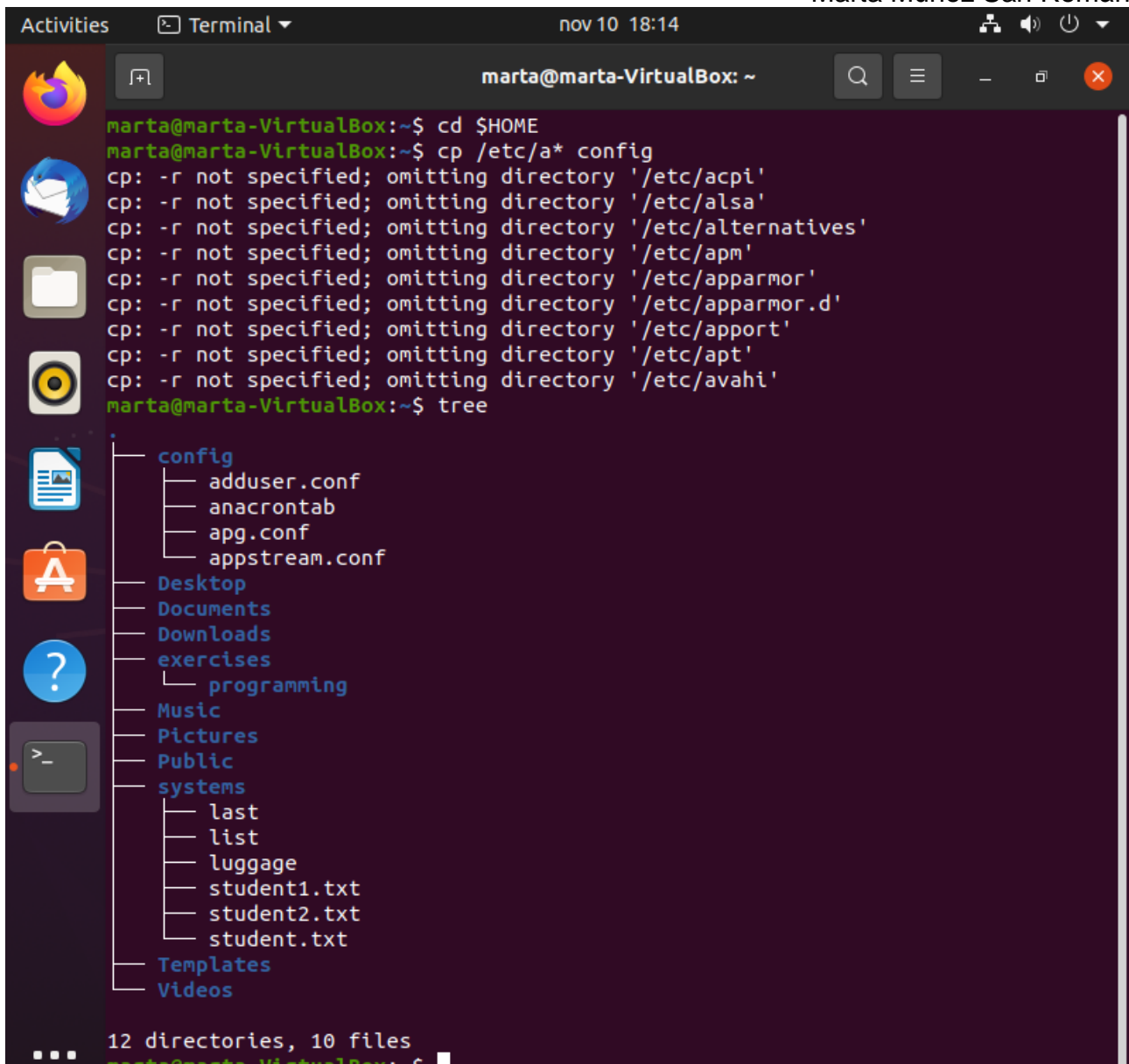
- `cd $HOME`
- `mkdir config`
- `ls`



```
Activities Terminal nov 10 17:50
marta@marta-VirtualBox: ~
marta@marta-VirtualBox:~$ cd $HOME
marta@marta-VirtualBox:~$ mkdir config
marta@marta-VirtualBox:~$ ls
config Documents exercises Pictures systems Videos
Desktop Downloads Music Public Templates
marta@marta-VirtualBox:~$
```

12. Copy all the files in /etc which begin with “a” into “config”

- `cp, and then the path /etc/a* config`
- `then, the copy you want to copy he files`
- `ls`

A terminal window titled 'marta@marta-VirtualBox: ~' showing the execution of a command to copy files from /etc to a directory named 'config'. The output shows several directories being omitted because they are not regular files. Then, the 'tree' command is used to list the contents of the 'config' directory.

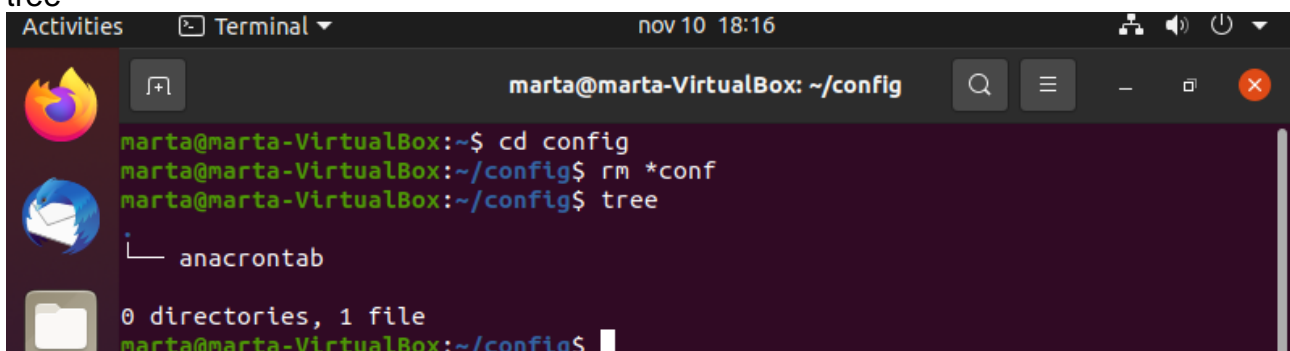
```
marta@marta-VirtualBox:~$ cd $HOME
marta@marta-VirtualBox:~$ cp /etc/a* config
cp: -r not specified; omitting directory '/etc/acpi'
cp: -r not specified; omitting directory '/etc/alsa'
cp: -r not specified; omitting directory '/etc/alternatives'
cp: -r not specified; omitting directory '/etc/apm'
cp: -r not specified; omitting directory '/etc/apparmor'
cp: -r not specified; omitting directory '/etc/apparmor.d'
cp: -r not specified; omitting directory '/etc/appport'
cp: -r not specified; omitting directory '/etc/apt'
cp: -r not specified; omitting directory '/etc/avahi'
marta@marta-VirtualBox:~$ tree
.
├── config
│   ├── adduser.conf
│   ├── anacrontab
│   ├── apg.conf
│   └── appstream.conf
├── Desktop
├── Documents
├── Downloads
├── exercises
│   └── programming
├── Music
├── Pictures
├── Public
├── systems
│   ├── last
│   ├── list
│   ├── luggage
│   ├── student1.txt
│   ├── student2.txt
│   └── student.txt
├── Templates
└── Videos

12 directories, 10 files
marta@marta-VirtualBox:~$
```

13. Delete all the files in “config” which end with “conf”

```
rm config/*conf
```

```
tree
```

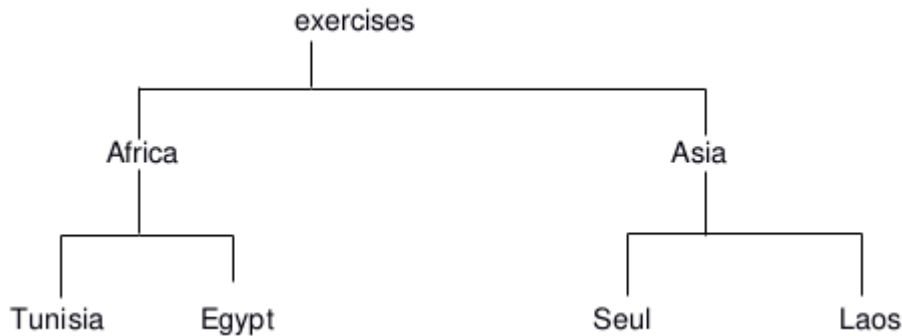
A terminal window titled 'marta@marta-VirtualBox: ~/config' showing the execution of a command to delete files ending in '.conf' from the 'config' directory. Then, the 'tree' command is used to list the remaining contents of the 'config' directory.

```
marta@marta-VirtualBox:~$ cd config
marta@marta-VirtualBox:~/config$ rm *conf
marta@marta-VirtualBox:~/config$ tree
.
└── anacrontab

0 directories, 1 file
marta@marta-VirtualBox:~/config$
```

B. COPY, RENAME AND EDIT FILES

Create the following directory structure in `/home/<user>/exercises`



```
marta@marta-VirtualBox:~/exercises$ tree
.
├── programming

1 directory, 0 files
marta@marta-VirtualBox:~/exercises$ mkdir Africa Asia
marta@marta-VirtualBox:~/exercises$ tree
.
├── Africa
├── Asia
└── programming

3 directories, 0 files
marta@marta-VirtualBox:~/exercises$ cd Africa
marta@marta-VirtualBox:~/exercises/Africa$ mkdir Tunisia Egypt
marta@marta-VirtualBox:~/exercises/Africa$ cd ..
marta@marta-VirtualBox:~/exercises$ cd Asia
marta@marta-VirtualBox:~/exercises/Asia$ mkdir Seoul Laos
marta@marta-VirtualBox:~/exercises/Asia$ cd ..
marta@marta-VirtualBox:~/exercises$ cd ..
marta@marta-VirtualBox:~$ tree
.
├── config
│   └── anacrontab
├── Desktop
├── Documents
├── Downloads
│   ├── 941898.jpg
│   └── The 13 Best Takes On the Windows XP Bliss Wallpaper Dorkly Post.jpg
├── exercises
│   ├── Africa
│   │   ├── Egypt
│   │   └── Tunisia
│   └── Asia
│       ├── Laos
│       └── Seoul
└── programming
```

14. Create the following files using nano (or another editor): song.doc (write a few lines of a song) in the directory Egypt; tv.doc (write the name of your favourite TV programs) in the directory Seul and marks (write the marks you expect to get this year) in the directory Tunisia.

Once the file has been created (using Nano, although it's possible to do it with "cat >Africa/Egypt/song.doc"), I proceed to move it to Egypt with the command "mv".

File created printed in the terminal using "tree":

```
marta@marta-VirtualBox:~$ cd exercises
marta@marta-VirtualBox:~/exercises$ nano
marta@marta-VirtualBox:~/exercises$ tree

.
├── Africa
│   ├── Egypt
│   └── Tunisia
├── Asia
│   ├── Laos
│   └── Seul
├── programming
└── song.doc

7 directories, 1 file
```

The path used to move the file:

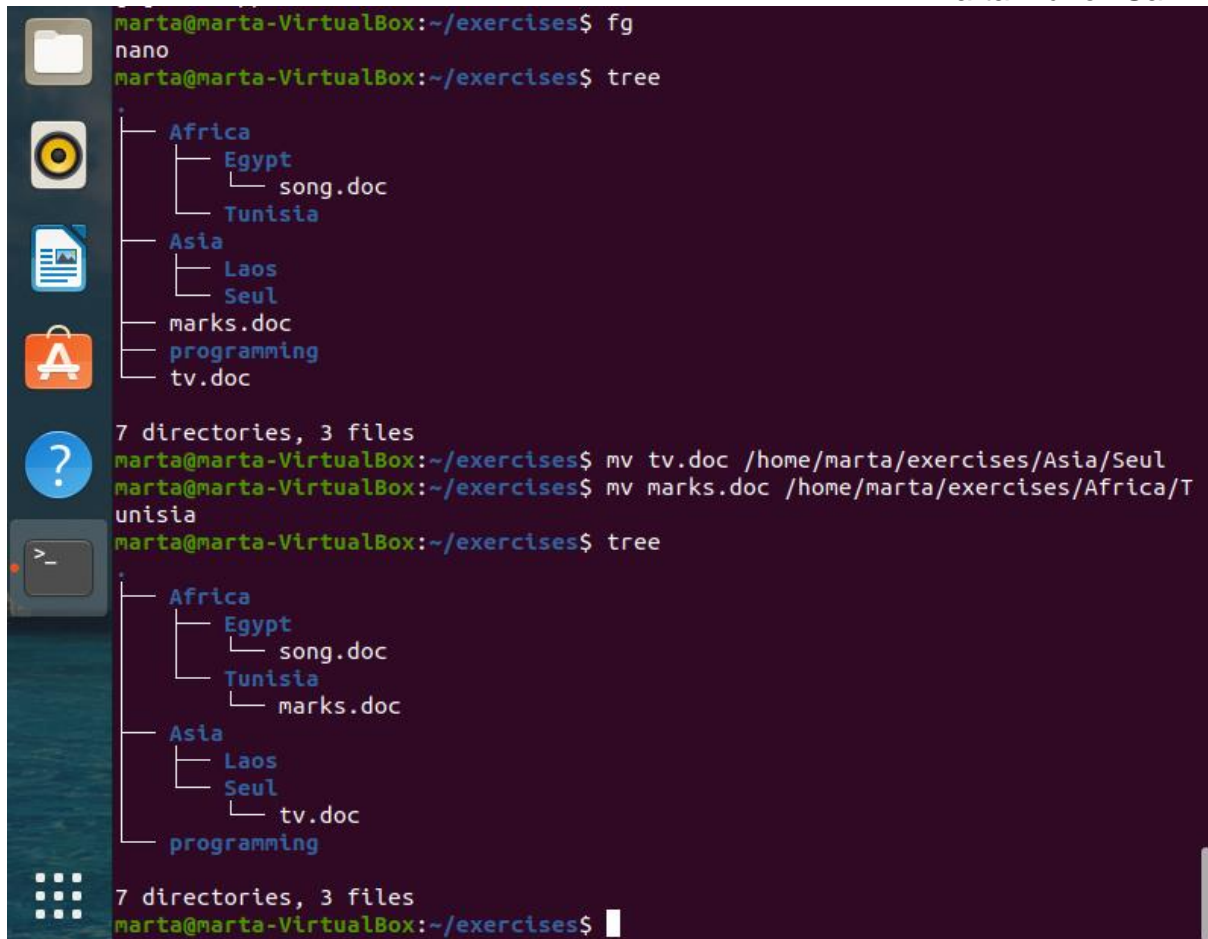
```
mv song.doc /home/marta/exercises/Africa/Egypt
```

```
marta@marta-VirtualBox:~/exercises$ mv song.doc /home/marta/exercises/Africa/Egypt
marta@marta-VirtualBox:~/exercises$ tree

.
├── Africa
│   ├── Egypt
│   │   └── song.doc
│   └── Tunisia
├── Asia
│   ├── Laos
│   └── Seul
├── programming
└──

7 directories, 1 file
marta@marta-VirtualBox:~/exercises$
```

The same steps are going to be done with the other files. So, it will give the following result:



```
marta@marta-VirtualBox:~/exercises$ fg
nano
marta@marta-VirtualBox:~/exercises$ tree
.
├── Africa
│   ├── Egypt
│   │   └── song.doc
│   └── Tunisia
├── Asia
│   ├── Laos
│   └── Seul
├── marks.doc
├── programming
└── tv.doc

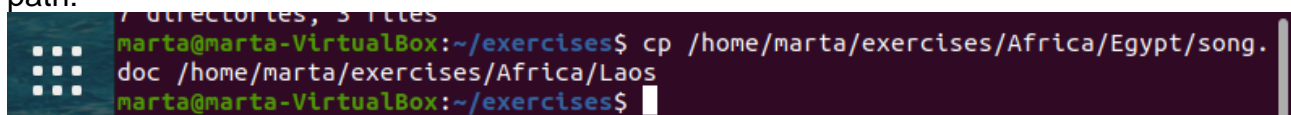
7 directories, 3 files
marta@marta-VirtualBox:~/exercises$ mv tv.doc /home/marta/exercises/Asia/Seul
marta@marta-VirtualBox:~/exercises$ mv marks.doc /home/marta/exercises/Africa/Tunisia
marta@marta-VirtualBox:~/exercises$ tree
.
├── Africa
│   ├── Egypt
│   │   └── song.doc
│   └── Tunisia
│       └── marks.doc
├── Asia
│   ├── Laos
│   └── Seul
│       └── tv.doc
└── programming

7 directories, 3 files
marta@marta-VirtualBox:~/exercises$
```

CHANGE THE CURRENT DIRECTORY TO AFRICA AND DO THE FOLLOWING EXERCISES USING RELATIVE PATHS

15. Copy the file “song.doc” into “Laos”

To copy a file, the command “cp” must be used, and then choose to copy the files by absolute or relative paths (the path should be “cp Egypt/song.doc ../Asia/Laos”). I have choose to use absolute ones, choosing firstly the source where the file belongs to and its destination path:



```
marta@marta-VirtualBox:~/exercises$ cp /home/marta/exercises/Africa/Egypt/song.doc /home/marta/exercises/Africa/Laos
marta@marta-VirtualBox:~/exercises$
```

16. Copy the file “tv.doc” into “Egypt” with the name “radio.txt”.

I make the same steps as in the previous exercise, changing the source and destination paths, because this is a different file, and changing the name file at the second path:

```
cp ../Asia/Seul/tv.doc Egypt/radio.txt
```

In my case, I have used an absolute path:

cp

/home/marta/exercises/Africa/Egypt/radio.txt

```
marta@marta-VirtualBox:~$ cp /home/marta/exercises/Asia/Seul/tv.doc /home/marta/exercises/Africa/Egypt/radio.txt
marta@marta-VirtualBox:~$ cd exercises
marta@marta-VirtualBox:~/exercises$ tree
.
├── Africa
│   ├── Egypt
│   │   ├── radio.txt
│   │   └── song.doc
│   └── Tunisia
│       └── marks.doc
├── Asia
│   ├── Laos
│   └── Seul
│       └── tv.doc
└── programming
7 directories, 4 files
marta@marta-VirtualBox:~/exercises$
```

17. Rename the file “marks” to “exam.wri” (it is located in the directory named Tunisia)

To do this, I can move the file to another location with “mv”, using a relative path (while I am in “Africa”, the folder inside “exercise”):

```
mv Tunisia/marks.doc Tunisia/exam.wri
```

```
marta@marta-VirtualBox:~/exercises$ cd Africa
marta@marta-VirtualBox:~/exercises/Africa$ mv Tunisia/marks.doc Tunisia/exam.wri
marta@marta-VirtualBox:~/exercises/Africa$
```

```
marta@marta-VirtualBox:~/exercises/Africa$ tree
.
├── Egypt
│   ├── radio.txt
│   └── song.doc
└── Tunisia
    └── exam.wri
2 directories, 3 files
marta@marta-VirtualBox:~/exercises/Africa$
```

*Notes: the name “marks” in my exercises is shown as “marks.doc” because I think that the extension “.doc” was forgotten or something else.

18. Copy the file “song.doc” (located in “Egypt”) inside “Tunisia”

To copy this file, I use the parameter “cp” again with the following route:

```
Cp Egypt/song.doc Tunisia/
```

```
2 directories, 3 files
marta@marta-VirtualBox:~/exercises/Africa$ cp Egypt/song.doc Tunisia/
marta@marta-VirtualBox:~/exercises/Africa$ tree
.
├── Egypt
│   ├── radio.txt
│   └── song.doc
└── Tunisia
    ├── exam.wri
    └── song.doc

2 directories, 4 files
```

19. Print the content of the current directory using long listing format

Being in `cd /exercises`, I type:

`ls -l`

```
marta@marta-VirtualBox:~/exercises$ ls -l
total 12
drwxrwxr-x 4 marta marta 4096 nov 18 18:32 Africa
drwxrwxr-x 4 marta marta 4096 nov 10 20:46 Asia
drwxrwxr-x 2 marta marta 4096 nov  4 19:04 programming
marta@marta-VirtualBox:~/exercises$
```

20. Rename the file “song.doc” (located in “Laos”) to “aa.doc”

It seems that the copied file, located originally in “Africa/Egypt”, wasn’t copied. So, in my case, I copied it again by using (in `/home/myuser/exercises/Africa`):

`cp` `Egypt/song.doc` `../Asia/Laos`

```
marta@marta-VirtualBox:~/exercises/Africa$ cp Egypt/song.doc ../Asia/Laos
marta@marta-VirtualBox:~/exercises/Africa$
```

Now, I can continue to the exercise, and execute the “mv” parameter in the following manner:

`mv ../Asia/Laos/song.doc ../Asia/Laos/aa.doc`

```
marta@marta-VirtualBox:~/exercises/Africa$ mv ../Asia/Laos/song.doc ../Asia/Laos/aa.doc
```

```
marta@marta-VirtualBox:~/exercises$ tree
.
├── Africa
│   ├── Egypt
│   │   ├── radio.txt
│   │   └── song.doc
│   └── Tunisia
│       ├── exam.wri
│       └── song.doc
├── Asia
│   ├── Laos
│   │   └── aa.doc
│   ├── Seul
│   │   └── tv.doc
│   └── programming
└── programming

7 directories, 6 files
```

21. Create the directory “Others” in “Laos”

To create it, I write the parameter “mkdir” in combination with:

```
mkdir ../Asia/Laos/Others
```

```
marta@marta-VirtualBox:~/exercises$ cd Asia
marta@marta-VirtualBox:~/exercises/Asia$ mkdir ../Asia/Laos/Others
marta@marta-VirtualBox:~/exercises/Asia$
```

Using a relative path.

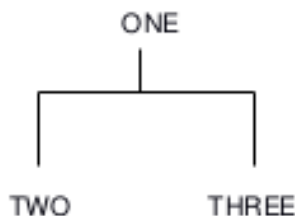
22. Rename the directory named “programming” (which you created in the first exercises) to pro-c.

To rename the directory “programming”, being in /home/myuser/exercises/Asia, I have to use the parameter “mv” and write:

```
mv ../programming ../pro-c
```

```
marta@marta-VirtualBox:~/exercises/Asia$ mv ../programming ../pro-c
marta@marta-VirtualBox:~/exercises/Asia$
```

23. Create the following directory tree in “exercises” (using as few commands as possible)



Being in my home folder, I use the “mkdir” parameter to create these new folders, logged as “sudo su”:

```
mkdir -p ../ONE/TWO;mkdir -p ../ONE/THREE
```

```
marta@marta-VirtualBox:~$ sudo su
[sudo] password for marta:
root@marta-VirtualBox:/home/marta# mkdir -p ../ONE/TWO; mkdir -p ../ONE/THREE
root@marta-VirtualBox:/home/marta#
```

24. Copy the files with txt extension from the directory named “systems” to “exercises”.

To copy those files, I use the parameter “cp” in combination with *

```
cp systems/*txt exercises
```

```
cp: target '/exercises' is not a directory
root@marta-VirtualBox:/home/marta# cp systems/*txt exercises
root@marta-VirtualBox:/home/marta#
```

25. Move the files you copied in the exercise above to the directory THREE.

To do this operation, I combine again the asterisk with another command, “mv”, that will move every file ending in .txt to the required folder:

```
mv ../*txt ../ONE/THREE
```

```
root@marta-VirtualBox:/home/marta# mv ../*txt ../ONE/THREE
root@marta-VirtualBox:/home/marta# tree
.
├── exercises
│   ├── Africa
│   │   ├── Egypt
│   │   │   ├── radio.txt
│   │   │   └── song.doc
│   │   └── Tunisia
│   │       ├── exam.wri
│   │       └── song.doc
│   ├── Asia
│   │   ├── Laos
│   │   │   ├── aa.doc
│   │   │   └── Others
│   │   └── Seul
│   │       └── tv.doc
│   └── ONE
│       ├── THREE
│       │   ├── student1.txt
│       │   ├── student2.txt
│       │   └── student.txt
│       └── TWO
└── ...
```

26. Delete the directory named THREE, including all the files and, if so, subdirectories

To delete the directory, the parameter “rm” will be used:

```
rm -rf ../ONE/THREE
```

```
root@marta-VirtualBox:/home/marta/exercises# rm -rf ONE/THREE
root@marta-VirtualBox:/home/marta/exercises# tree
.
├── Africa
│   ├── Egypt
│   │   ├── radio.txt
│   │   └── song.doc
│   └── Tunisia
│       ├── exam.wri
│       └── song.doc
├── Asia
│   ├── Laos
│   │   ├── aa.doc
│   │   └── Others
│   └── Seul
│       └── tv.doc
├── ONE
└── TWO

9 directories, 6 files
```

CHANGE INTO SYSTEMS AND DO THE FOLLOWING EXERCISES USING ABSOLUTE PATHS

27. Copy the files that end with “txt” of the directory named “systems” to “Tunisia”

To do this operation, I have to manage the parameter “cp”, selecting the origin of the files that I want to copy (all the files ended in .txt) and the destination file:

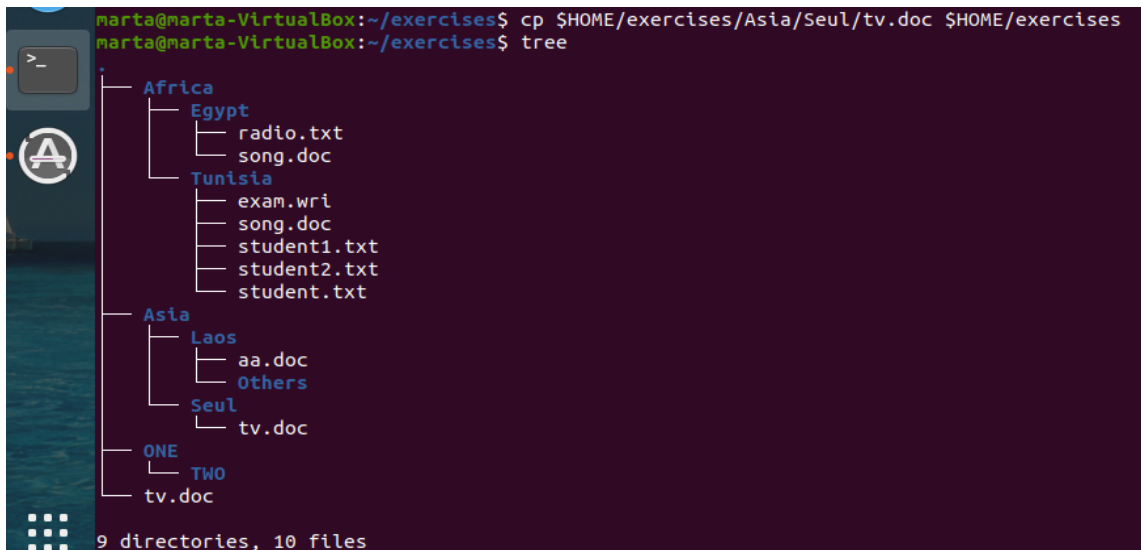
```
cp systems/*txt $HOME/exercises/Africa/Tunisia
```

```
marta@marta-VirtualBox:~$ cp systems/*txt $HOME/exercises/Africa/Tunisia
marta@marta-VirtualBox:~$ tree
.
├── Windows XP HD Wallpaper Pack.jpg
├── Windows XP HD Wallpaper Pack Wallpaper.jpg
├── exercises
│   ├── Africa
│   │   ├── Egypt
│   │   │   ├── radio.txt
│   │   │   └── song.doc
│   │   └── Tunisia
│   │       ├── exam.wri
│   │       ├── song.doc
│   │       ├── student1.txt
│   │       ├── student2.txt
│   │       └── student.txt
│   ├── Asia
│   │   ├── Laos
│   │   │   ├── aa.doc
│   │   │   └── Others
│   │   └── Seul
│   │       └── tv.doc
│   ├── ONE
│   └── TWO
```

28. Copy the file “tv.doc” (located in “Seul”) to the directory named “exercises”

To copy this file, I use again “cp”, while I am in the “exercises” directory:

```
cp $HOME/exercises/Asia/Seul/tv.doc $HOME/exercises
```

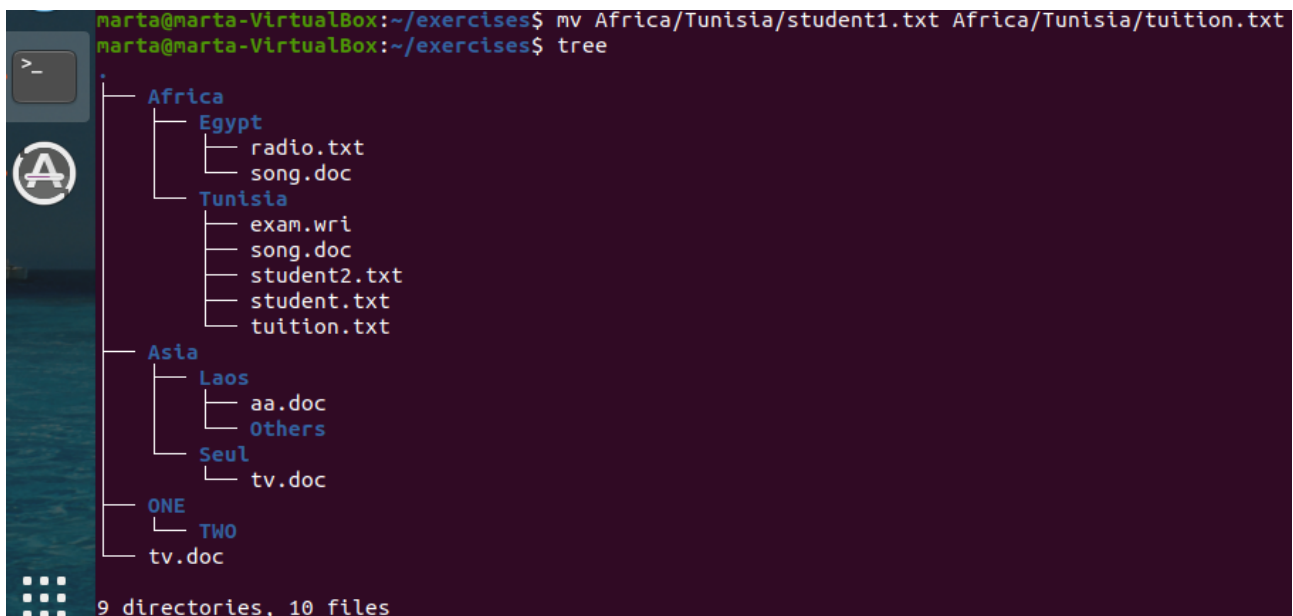


```
marta@marta-VirtualBox:~/exercises$ cp $HOME/exercises/Asia/Seul/tv.doc $HOME/exercises
marta@marta-VirtualBox:~/exercises$ tree
.
├── Africa
│   ├── Egypt
│   │   ├── radio.txt
│   │   └── song.doc
│   └── Tunisia
│       ├── exam.wri
│       ├── song.doc
│       ├── student1.txt
│       ├── student2.txt
│       └── student.txt
├── Asia
│   ├── Laos
│   │   └── aa.doc
│   ├── Others
│   └── Seul
│       └── tv.doc
├── ONE
│   └── TWO
│       └── tv.doc
└── 9 directories, 10 files
```

29. Rename the file student1.txt (located in “Tunisia”) to tuition.txt

To rename a file, I just have to move with “mv” the file inside its same location:

```
mv Africa/Tunisia/student1.txt Africa/Tunisia/tuition.txt
```



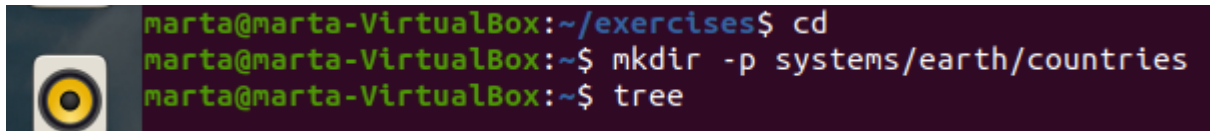
```
marta@marta-VirtualBox:~/exercises$ mv Africa/Tunisia/student1.txt Africa/Tunisia/tuition.txt
marta@marta-VirtualBox:~/exercises$ tree
.
├── Africa
│   ├── Egypt
│   │   ├── radio.txt
│   │   └── song.doc
│   └── Tunisia
│       ├── exam.wri
│       ├── song.doc
│       ├── student2.txt
│       ├── student.txt
│       └── tuition.txt
├── Asia
│   ├── Laos
│   │   └── aa.doc
│   ├── Others
│   └── Seul
│       └── tv.doc
├── ONE
│   └── TWO
│       └── tv.doc
└── 9 directories, 10 files
```

30. Create a new directory called “earth” into “systems”. Create another directory at the same branch called “countries” inside “earth”

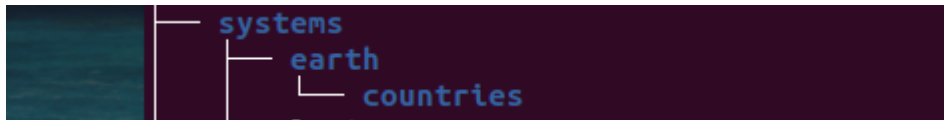
```
mkdir -p systems/earth/countries
```

```
cd systems
```

```
tree
```

A terminal window with a dark purple background. The prompt is 'marta@marta-VirtualBox:~/exercises\$'. The user enters 'cd', then 'mkdir -p systems/earth/countries', and finally 'tree'.

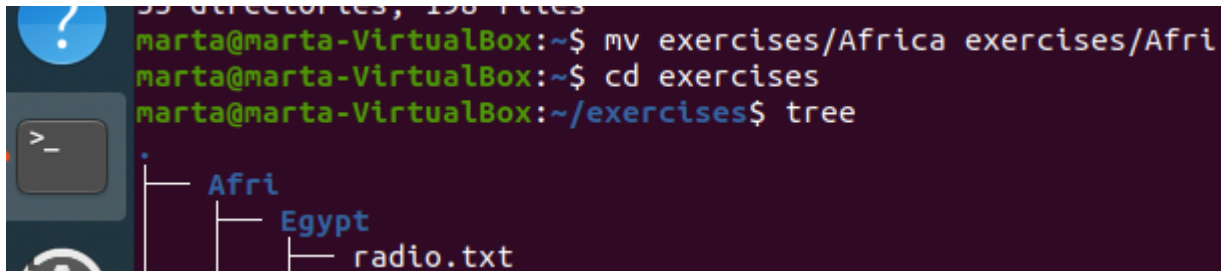
```
marta@marta-VirtualBox:~/exercises$ cd
marta@marta-VirtualBox:~$ mkdir -p systems/earth/countries
marta@marta-VirtualBox:~$ tree
```

A terminal window showing the output of the 'tree' command. It displays a tree structure with 'systems' at the root, 'earth' as a subdirectory, and 'countries' as a subdirectory of 'earth'.

```
systems
├── earth
│   └── countries
```

31. Rename “Africa” (located in “exercises”) to “Afri”

```
mv exercises/Africa exercises/Africa
```

A terminal window showing the execution of 'mv exercises/Africa exercises/Africa' (which appears to be a typo for 'Afri' in the original image), followed by 'cd exercises' and 'tree'. The 'tree' command shows a directory structure with 'Afri' as a subdirectory, containing 'Egypt' and 'radio.txt'.

```
marta@marta-VirtualBox:~$ mv exercises/Africa exercises/Africa
marta@marta-VirtualBox:~$ cd exercises
marta@marta-VirtualBox:~/exercises$ tree
```

```
.
├── Afri
│   └── Egypt
│       └── radio.txt
```

NOW YOU CAN BE PLACED IN THE DIRECTORY YOU WANT

32. Move the file “song.doc”, which is located in Egypt, to “Laos” with the name “bb.doc”

```
in exercises: mv Afri/Egypt/song.doc Asia/Laos/bb.doc
```

```
cd Asia
```

```
tree
```



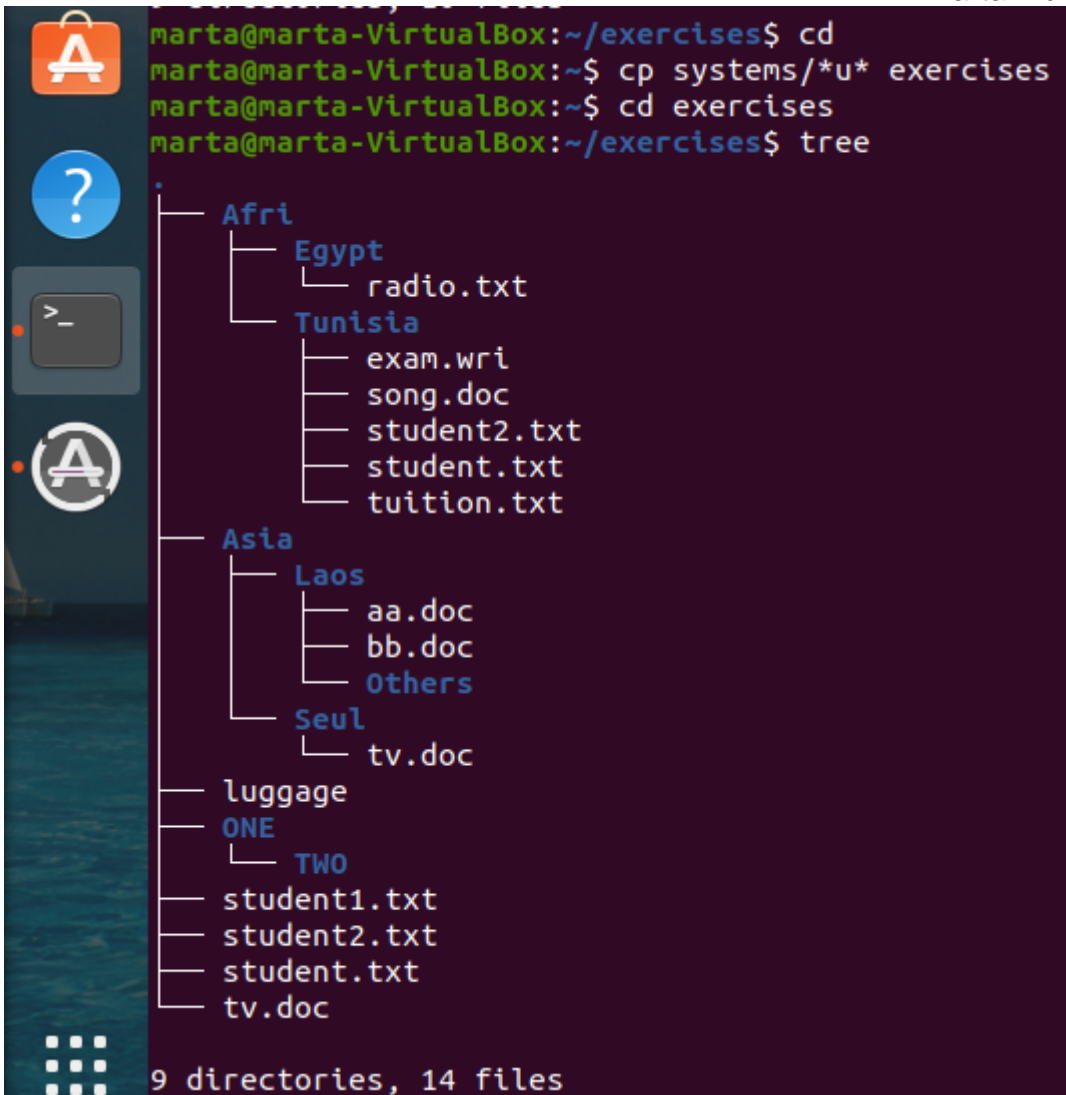
```
5 directories, 10 files
marta@marta-VirtualBox:~/exercises$ mv Afri/Egypt/song.doc Asia/Laos/bb.doc
marta@marta-VirtualBox:~/exercises$ tree
.
├── Afri
│   ├── Egypt
│   │   └── radio.txt
│   └── Tunisia
│       ├── exam.wri
│       ├── song.doc
│       ├── student2.txt
│       ├── student.txt
│       └── tuition.txt
└── Asia
    └── Laos
        ├── aa.doc
        └── bb.doc
```

33. Copy the files whose name contains the letter “u” from “systems” to “exercises”

```
cp systems/*u* exercises
```

```
cd exercises
```

```
tree
```

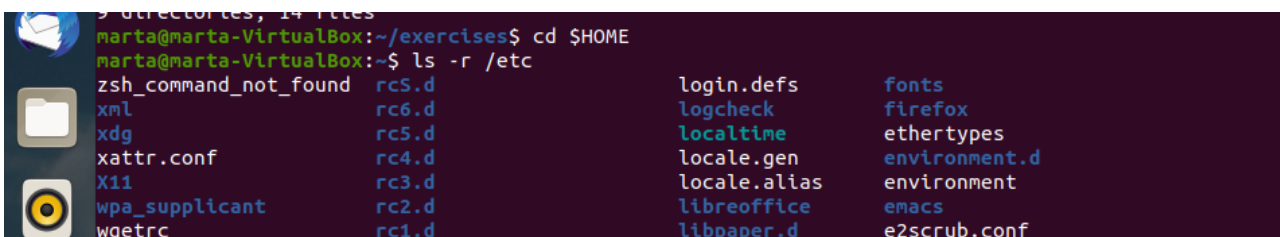
A terminal window with a dark background and light-colored text. The prompt is 'marta@marta-VirtualBox:~/exercises\$'. The user enters 'cd', then 'cp systems/*u* exercises', then 'cd exercises', and finally 'tree'. The 'tree' command output shows a directory structure: a root directory with subdirectories 'Afri', 'Asia', 'luggage', 'ONE', and 'TWO'. 'Afri' contains 'Egypt' (with 'radio.txt') and 'Tunisia' (with 'exam.wri', 'song.doc', 'student2.txt', 'student.txt', and 'tuition.txt'). 'Asia' contains 'Laos' (with 'aa.doc' and 'bb.doc') and 'Seul' (with 'tv.doc'). 'luggage' contains 'ONE' (with 'TWO') and three text files: 'student1.txt', 'student2.txt', and 'student.txt'. 'TWO' contains 'tv.doc'. At the bottom, it says '9 directories, 14 files'.

```
marta@marta-VirtualBox:~/exercises$ cd
marta@marta-VirtualBox:~$ cp systems/*u* exercises
marta@marta-VirtualBox:~$ cd exercises
marta@marta-VirtualBox:~/exercises$ tree
.
├── Afri
│   ├── Egypt
│   │   └── radio.txt
│   └── Tunisia
│       ├── exam.wri
│       ├── song.doc
│       ├── student2.txt
│       ├── student.txt
│       └── tuition.txt
├── Asia
│   ├── Laos
│   │   ├── aa.doc
│   │   └── bb.doc
│   └── Seul
│       └── tv.doc
├── luggage
├── ONE
│   └── TWO
├── student1.txt
├── student2.txt
├── student.txt
└── tv.doc
9 directories, 14 files
```

34. Print the content of the /etc directory, including subdirectories, in reverse alphabetical order

cd \$HOME

ls -r /etc

A terminal window showing the output of 'ls -r /etc'. The output is a long list of files and directories in reverse alphabetical order, displayed in four columns. The files include 'zsh_command_not_found', 'xml', 'xdg', 'xattr.conf', 'X11', 'wpa_supplicant', 'wgetrc', 'rc5.d', 'rc6.d', 'rc5.d', 'rc4.d', 'rc3.d', 'rc2.d', 'rc1.d', 'login.defs', 'logcheck', 'localtime', 'locale.gen', 'locale.alias', 'libreoffice', 'libpaper.d', 'fonts', 'firefox', 'ethertypes', 'environment.d', 'environment', 'emacs', and 'e2scrub.conf'.

```
marta@marta-VirtualBox:~/exercises$ cd $HOME
marta@marta-VirtualBox:~$ ls -r /etc
zsh_command_not_found rc5.d login.defs fonts
xml rc6.d logcheck firefox
xdg rc5.d localtime ethertypes
xattr.conf rc4.d locale.gen environment.d
X11 rc3.d locale.alias environment
wpa_supplicant rc2.d libreoffice emacs
wgetrc rc1.d libpaper.d e2scrub.conf
```

35. How can you print the name of the current directory?

Pwd

```
resolv.conf      logrotate.conf
marta@marta-VirtualBox:~$ pwd
/home/marta
```

36. Copy the folder “Afri” including files and subdirectories to “Asia”

```
cd /home
```

```
cp -R exercises/Afri exercises/Asia → It will copy ALL,if not there will be a warning
```

```
cd exercises
```

```
tree
```

```
marta@marta-VirtualBox:~$ cd exercises
marta@marta-VirtualBox:~/exercises$ cp -R Afri Asia
marta@marta-VirtualBox:~/exercises$ tree
```

```

├── Afri
│   ├── Egypt
│   │   └── radio.txt
│   └── Tunisia
│       ├── exam.wri
│       ├── song.doc
│       ├── student2.txt
│       ├── student.txt
│       └── tuition.txt
├── Asia
│   ├── Afri
│   │   ├── Egypt
│   │   │   └── radio.txt
│   │   └── Tunisia
│   │       ├── exam.wri
│   │       ├── song.doc
│   │       ├── student2.txt
│   │       ├── student.txt
│   │       └── tuition.txt
│   └── Laos
└── Laos
```

37. Move all the files and subdirectories of “Laos” to “Seul” and rename it to “Seul2”

In this case I want to copy Laos to rename it in the destination, but it is possible to only copy the content using `mv Laos/* Seul` (Seul2 is not included because I am directly copying the files and subfolders from the source).

```
cd Asia
```

```
mv Laos Seul/Seul2
```

tree

```
marta@marta-VirtualBox:~/exercises$ cd Asia
marta@marta-VirtualBox:~/exercises/Asia$ mv Laos Seul/Seul2
marta@marta-VirtualBox:~/exercises/Asia$ tree
```

```
.
├── Afri
│   ├── Egypt
│   │   └── radio.txt
│   └── Tunisia
│       ├── exam.wri
│       ├── song.doc
│       ├── student2.txt
│       ├── student.txt
│       └── tuition.txt
└── Seul
    ├── Seul2
    │   ├── aa.doc
    │   ├── bb.doc
    │   └── Others
    └── tv.doc
```

```
6 directories, 9 files
```