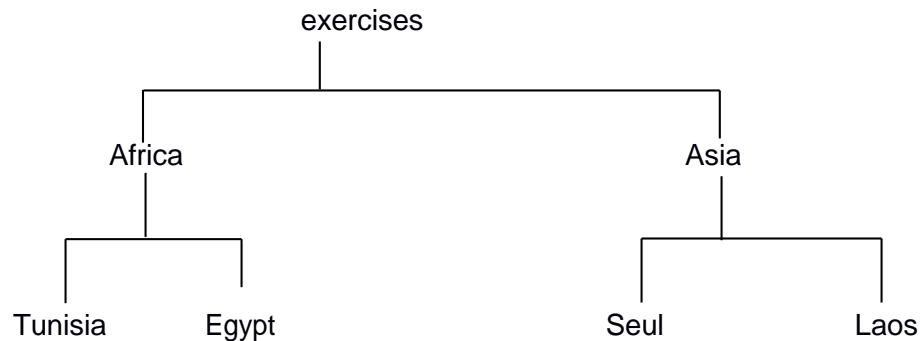


B. COPY, RENAME AND EDIT FILES

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



```

Terminal - zeus@zeus-VirtualBox: ~
File Edit View Terminal Tabs Help
zeus@zeus-VirtualBox:~$ pwd
/home/zeus
zeus@zeus-VirtualBox:~$ mkdir -p exercises/Asia/{Seul,Laos}
zeus@zeus-VirtualBox:~$ tree exercises/
exercises/
├── Asia
│   ├── Laos
│   └── Seul
3 directories, 0 files
zeus@zeus-VirtualBox:~$ mkdir -p exercises/Africa/{Tunisia,Egypt}
zeus@zeus-VirtualBox:~$ tree exercises/
exercises/
├── Africa
│   ├── Egypt
│   └── Tunisia
└── Asia
    ├── Laos
    └── Seul
6 directories, 0 files
zeus@zeus-VirtualBox:~$
  
```

f

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**.

```

zeus@zeus-VirtualBox:~$ echo "Highway to hell (I'm on the highway to h
ell)" > exercises/Africa/Egypt/song.doc
zeus@zeus-VirtualBox:~$ cat exercises/Africa/Egypt/song.doc
Highway to hell (I'm on the highway to hell)
  
```

```
zeus@zeus-VirtualBox:~$ nano exercises/Asia/Seul/tv.doc
zeus@zeus-VirtualBox:~$
```

```

Terminal - zeus@zeus-VirtualBox: ~
File Edit View Terminal Tabs Help
zeus@zeus-VirtualBox:~$ tree exercises/
exercises/
├── Africa
│   ├── Egypt
│   │   └── song.doc
│   └── Tunisia
│       └── marks
└── Asia
    ├── Laos
    └── Seul
        └── tv.doc

6 directories, 3 files
zeus@zeus-VirtualBox:~$ cat exercises/Africa/Egypt/song.doc
Highway to hell (I'm on the highway to hell)
zeus@zeus-VirtualBox:~$ cat exercises/Africa/Tunisia/marks
?
zeus@zeus-VirtualBox:~$ cat exercises/Asia/Seul/tv.doc
Big Bang
zeus@zeus-VirtualBox:~$

```

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

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

```

File Edit View Terminal Tabs Help
zeus@zeus-VirtualBox:~$ pwd
/home/zeus
zeus@zeus-VirtualBox:~$ tree exercises/
exercises/
├── Africa
│   ├── Egypt
│   │   └── song.doc
│   └── Tunisia
│       └── marks
└── Asia
    ├── Laos
    └── Seul
        └── tv.doc

6 directories, 3 files
zeus@zeus-VirtualBox:~$ cd exercises/Africa/
zeus@zeus-VirtualBox:~/exercises/Africa$ cp Egypt/song.doc ../Asia/Laos/
zeus@zeus-VirtualBox:~/exercises/Africa$ ls -l ../Asia/Laos/
total 4
-rw-rw-r-- 1 zeus zeus 45 ene 16 11:04 song.doc
zeus@zeus-VirtualBox:~/exercises/Africa$ cp ../Asia/Seul/tv.doc Egypt/radio.txt

```

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

```

zeus@zeus-VirtualBox:~/exercises/Africa$ ls -l Egypt/
total 8
-rw-rw-r-- 1 zeus zeus 9 ene 16 11:06 radio.txt
-rw-rw-r-- 1 zeus zeus 45 ene 14 21:19 song.doc
zeus@zeus-VirtualBox:~/exercises/Africa$

```

17. Rename the file "marks" to "exam.wri" (it is located in the directory named Tunisia)
18. Copy the file "song.doc" (located in "Egypt") inside "Tunisia"
19. Print the content of the current directory using long listing format

```

Terminal - zeus@zeus-VirtualBox: ~/exercises/Africa
File Edit View Terminal Tabs Help
zeus@zeus-VirtualBox:~/exercises/Africa$ tree ../../exercises/
../../exercises/
├── Africa
│   ├── Egypt
│   │   ├── radio.txt
│   │   └── song.doc
│   └── Tunisia
│       └── marks
└── Asia
    ├── Laos
    │   └── song.doc
    └── Seul
        └── tv.doc

6 directories, 5 files
zeus@zeus-VirtualBox:~/exercises/Africa$ mv Tunisia/marks Tunisia/marks.wri
zeus@zeus-VirtualBox:~/exercises/Africa$ cp Egypt/song.doc Tunisia/
zeus@zeus-VirtualBox:~/exercises/Africa$ ls -l
total 8
drwxrwxr-x 2 zeus zeus 4096 ene 16 11:06 Egypt
drwxrwxr-x 2 zeus zeus 4096 ene 16 11:14 Tunisia

```

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

```

zeus@zeus-VirtualBox:~/exercises/Africa$ mv ../Asia/Laos/"song.doc" ../Asia/Laos/
"aa.doc"
zeus@zeus-VirtualBox:~/exercises/Africa$ ls -l ../Asia/Laos
total 4
-rw-rw-r-- 1 zeus zeus 45 ene 16 11:04 aa.doc
zeus@zeus-VirtualBox:~/exercises/Africa$

```

21. Create the directory "Others" in "Laos"

```

zeus@zeus-VirtualBox:~/exercises/Africa$ mkdir ../Asia/Laos/"Others"
zeus@zeus-VirtualBox:~/exercises/Africa$ ls -l ../Asia/Laos
total 8
-rw-rw-r-- 1 zeus zeus 45 ene 16 11:04 aa.doc
drwxrwxr-x 2 zeus zeus 4096 ene 16 11:21 Others

```

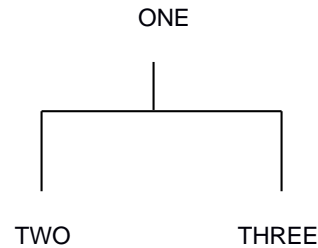
22. Rename the directory named "programming" (which you created in the first exercises) to pro-c.

```

zeus@zeus-VirtualBox:~/exercises/Africa$ mkdir ../../exercises/programming
zeus@zeus-VirtualBox:~/exercises/Africa$ mv ../../exercises/"programming" ../../exerci
ses/pro-c
zeus@zeus-VirtualBox:~/exercises/Africa$ ls -l ../../exercises/
total 12
drwxrwxr-x 4 zeus zeus 4096 ene 14 21:07 Africa
drwxrwxr-x 4 zeus zeus 4096 ene 14 21:06 Asia
drwxrwxr-x 2 zeus zeus 4096 ene 16 11:37 pro-c
zeus@zeus-VirtualBox:~/exercises/Africa$

```

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



```

zeus@zeus-VirtualBox:~/exercises/Africa$ mkdir -p ../../exercises/ONE/{TWO,THREE}
zeus@zeus-VirtualBox:~/exercises/Africa$ tree ../../exercises/
../../exercises/
├── Africa
│   ├── Egypt
│   │   ├── radi.txt
│   │   └── song.doc
│   ├── Tunisia
│   │   ├── marks.wri
│   │   └── song.doc
│   ├── Asia
│   │   ├── Laos
│   │   │   └── aa.doc
│   │   ├── Others
│   │   └── Seoul
│   │       └── lv.doc
│   └── ONE
│       ├── THREE
│       └── TWO
├── pro-c
├── systems
└── zeus
  
```

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

```

zeus@zeus-VirtualBox:~$ ls -l Documents/systems/
total 0
-rw-rw-r-- 1 zeus zeus 0 ene 13 22:26 last
-rw-rw-r-- 1 zeus zeus 0 ene 13 22:26 list
-rw-rw-r-- 1 zeus zeus 0 ene 13 22:26 luggage
-rw-rw-r-- 1 zeus zeus 0 ene 13 22:25 students1.txt
-rw-rw-r-- 1 zeus zeus 0 ene 13 22:25 students2.txt
-rw-rw-r-- 1 zeus zeus 0 ene 13 22:25 students.txt

zeus@zeus-VirtualBox:~$ tree -L 1 exercises/
exercises/
├── Africa
├── Asia
├── ONE
├── pro-c
├── students1.txt
├── students2.txt
├── students.txt
├── systems
└── zeus
  
```

```

zeus@zeus-VirtualBox:~/exercises/Africa$ cp ../../Documents/systems/*.txt ../../exercises/
zeus@zeus-VirtualBox:~/exercises/Africa$
  
```

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

```

zeus@zeus-VirtualBox:~$ tree -L 1 exercises/
exercises/
├── Africa
├── Asia
├── ONE
├── pro-c
├── students1.txt
├── students2.txt
├── students.txt
├── systems
└── zeus
  
```

```

zeus@zeus-VirtualBox:~/exercises/Africa$ mv ../students*.txt ../ONE/THREE/
zeus@zeus-VirtualBox:~/exercises/Africa$ ls -l ../ONE/THREE/
total 0
-rw-rw-r-- 1 zeus zeus 0 ene 16 12:04 students1.txt
-rw-rw-r-- 1 zeus zeus 0 ene 16 12:04 students2.txt
-rw-rw-r-- 1 zeus zeus 0 ene 16 12:04 students.txt
  
```

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

```

zeus@zeus-VirtualBox:~/exercises/Africa$ rm -rf ../ONE/THREE/
zeus@zeus-VirtualBox:~/exercises/Africa$ ls -l ../ONE/THREE/
ls: cannot access '../ONE/THREE/': No such file or directory
zeus@zeus-VirtualBox:~/exercises/Africa$
  
```

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”

```
zeus@zeus-VirtualBox:~/exercises/Africa$ pwd
/home/zeus/exercises/Africa
zeus@zeus-VirtualBox:~/exercises/Africa$ cd ../../Documents/systems/
zeus@zeus-VirtualBox:~/Documents/systems$ ls
last list luggage students1.txt students2.txt students.txt
zeus@zeus-VirtualBox:~/Documents/systems$ ls -l /home/zeus/exercises/Africa/Tunisia/
total 8
-rw-rw-r-- 1 zeus zeus  2 ene 14 21:26 marks.wri
-rw-rw-r-- 1 zeus zeus 45 ene 16 11:14 song.doc
zeus@zeus-VirtualBox:~/Documents/systems$ cp *.txt /home/zeus/exercises/Africa/Tunisia/
zeus@zeus-VirtualBox:~/Documents/systems$ ls -l /home/zeus/exercises/Africa/Tunisia/
total 8
-rw-rw-r-- 1 zeus zeus  2 ene 14 21:26 marks.wri
-rw-rw-r-- 1 zeus zeus 45 ene 16 11:14 song.doc
-rw-rw-r-- 1 zeus zeus  0 ene 16 12:31 students1.txt
-rw-rw-r-- 1 zeus zeus  0 ene 16 12:31 students2.txt
-rw-rw-r-- 1 zeus zeus  0 ene 16 12:31 students.txt
```

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

```
zeus@zeus-VirtualBox:~/Documents/systems$ cp /home/zeus/exercises/Asia/Seul/tv.doc /home/zeus/exercises/
zeus@zeus-VirtualBox:~/Documents/systems$ ls -l /home/zeus/exercises/
total 20
drwxrwxr-x 4 zeus zeus 4096 ene 14 21:07 Africa
drwxrwxr-x 4 zeus zeus 4096 ene 14 21:06 Asia
drwxrwxr-x 3 zeus zeus 4096 ene 16 12:10 ONE
drwxrwxr-x 2 zeus zeus 4096 ene 16 11:37 pro-c
-rw-rw-r-- 1 zeus zeus  9 ene 16 12:33 tv.doc
zeus@zeus-VirtualBox:~/Documents/systems$
```

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

```
zeus@zeus-VirtualBox:~/Documents/systems$ mv /home/zeus/exercises/Africa/Tunisia/students1.txt /home/zeus/exercises/Africa/Tunisia/tuition.txt
zeus@zeus-VirtualBox:~/Documents/systems$ ls -l /home/zeus/exercises/Africa/Tunisia/
total 8
-rw-rw-r-- 1 zeus zeus  2 ene 14 21:26 marks.wri
-rw-rw-r-- 1 zeus zeus 45 ene 16 11:14 song.doc
-rw-rw-r-- 1 zeus zeus  0 ene 16 12:31 students2.txt
-rw-rw-r-- 1 zeus zeus  0 ene 16 12:31 students.txt
-rw-rw-r-- 1 zeus zeus  0 ene 16 12:31 tuition.txt
zeus@zeus-VirtualBox:~/Documents/systems$
```

30. Create a new directory called “earth” into “systems”. Create another directory called “countries” inside “earth”

```
zeus@zeus-VirtualBox:~/Documents/systems$ mkdir -p "earth"/"countries"
zeus@zeus-VirtualBox:~/Documents/systems$ tree -L 2
├── earth
│   └── countries
├── last
├── list
├── luggage
├── students1.txt
├── students2.txt
└── students.txt

2 directories, 6 files
```

31. Rename "Africa" (located in "exercises") to "Afr"

```
zeus@zeus-VirtualBox:~/Documents/systems$ mv /home/zeus/exercises/Africa /home/zeus/exercises/Afr
zeus@zeus-VirtualBox:~/Documents/systems$ tree -L 1 /home/zeus/exercises/
/home/zeus/exercises/
├── Afr
├── Asia
├── ONE
├── pro-c
└── tv.doc
```

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"

```
zeus@zeus-VirtualBox:~/exercises/Asia/Laos$ mv ../../Afr/Egypt/song.doc bb.doc
zeus@zeus-VirtualBox:~/exercises/Asia/Laos$ ls
aa.doc bb.doc Others
```

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

```
zeus@zeus-VirtualBox:~/exercises/Asia/Laos$ ls -l ../../
total 20
drwxrwxr-x 4 zeus zeus 4096 ene 14 21:07 Afr
drwxrwxr-x 4 zeus zeus 4096 ene 14 21:06 Asia
drwxrwxr-x 3 zeus zeus 4096 ene 16 12:10 ONE
drwxrwxr-x 2 zeus zeus 4096 ene 16 11:37 pro-c
-rw-rw-r-- 1 zeus zeus    9 ene 16 12:33 tv.doc
zeus@zeus-VirtualBox:~/exercises/Asia/Laos$ cp ../../Documents/systems/*u* ../../
zeus@zeus-VirtualBox:~/exercises/Asia/Laos$ ls -l ../../
total 20
drwxrwxr-x 4 zeus zeus 4096 ene 14 21:07 Afr
drwxrwxr-x 4 zeus zeus 4096 ene 14 21:06 Asia
-rw-rw-r-- 1 zeus zeus    0 ene 16 12:50 luggage
drwxrwxr-x 3 zeus zeus 4096 ene 16 12:10 ONE
drwxrwxr-x 2 zeus zeus 4096 ene 16 11:37 pro-c
-rw-rw-r-- 1 zeus zeus    0 ene 16 12:50 students1.txt
-rw-rw-r-- 1 zeus zeus    0 ene 16 12:50 students2.txt
-rw-rw-r-- 1 zeus zeus    0 ene 16 12:50 students.txt
-rw-rw-r-- 1 zeus zeus    9 ene 16 12:33 tv.doc
```

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

Yes

tree -r

*(tree spugL 1 # s = size, p= permissions, u= user, g= group, L= level, in this case on ly print first level)

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

With full path

pwd

**Only the name Without full path

echo "\${PWD##*/}"

basename \$PWD

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

```
zeus@zeus-VirtualBox:~/exercises$ tree -L 2 Asia/
Asia/
├── Laos
│   ├── aa.doc
│   ├── bb.doc
│   └── Others
└── Seul
    └── tv.doc

3 directories, 3 files
zeus@zeus-VirtualBox:~/exercises$ cp -r Afr/ Asia/
zeus@zeus-VirtualBox:~/exercises$ tree -L 2 Asia/
Asia/
├── Afr
│   ├── Egypt
│   └── Tunisia
├── Laos
│   ├── aa.doc
│   ├── bb.doc
│   └── Others
└── Seul
    └── tv.doc
```

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

```
zeus@zeus-VirtualBox:~/exercises$ tree -L 2 Asia/
Asia/
├── Afr
│   ├── Egypt
│   └── Tunisia
├── Laos
│   ├── aa.doc
│   ├── bb.doc
│   └── Others
└── Seul
    └── tv.doc

6 directories, 3 files
zeus@zeus-VirtualBox:~/exercises$ mv Asia/Laos/* Asia/Seul && mv Asia/Laos Asia/Seul2
zeus@zeus-VirtualBox:~/exercises$ tree -L 2 Asia/
Asia/
├── Afr
│   ├── Egypt
│   └── Tunisia
├── Seul
│   ├── aa.doc
│   ├── bb.doc
│   └── Others
└── Seul2
    └── tv.doc
```

References:

*<https://linux.die.net/man/1/tree>

**<https://stackoverflow.com/questions/1371261/get-current-directory-name-without-full-path-in-a-bash-script>