## Week Report 4

"The Linux File System" : Practice

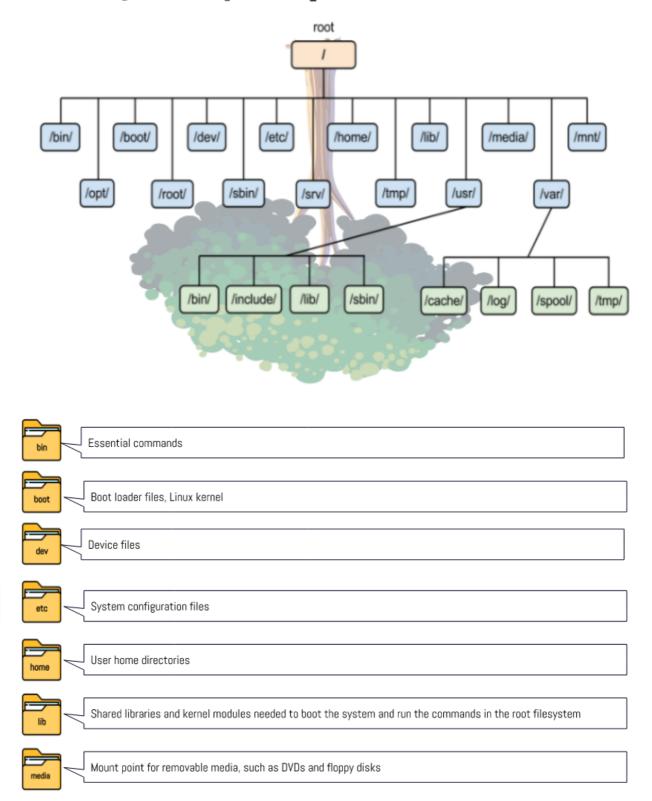
```
1/1 ~ | + |
            [†
                                 Tilix: mmedina@cis106: ~
 1: mmedina@cis106: ~ ~
mmedina@cis106:~$ pwd
/home/mmedina
mmedina@cis106:~$ cd Downloads/
medina@cis106:~/Downloads$ pwd
 home/mmedina/Downloads
medina@cis106:~/Downloads$ cd ...
 mediwa@cis106:~$ pwd
/home/mmedina
mmedina@cis106:~$ cd ../../
mmedinaacis106:/$ pwd
mmedina@cis106:/$ cd -
/home/mmedina
mmedina@cis106:~$ pwd
/home/mmedina
mmedina@cis106:~$
```

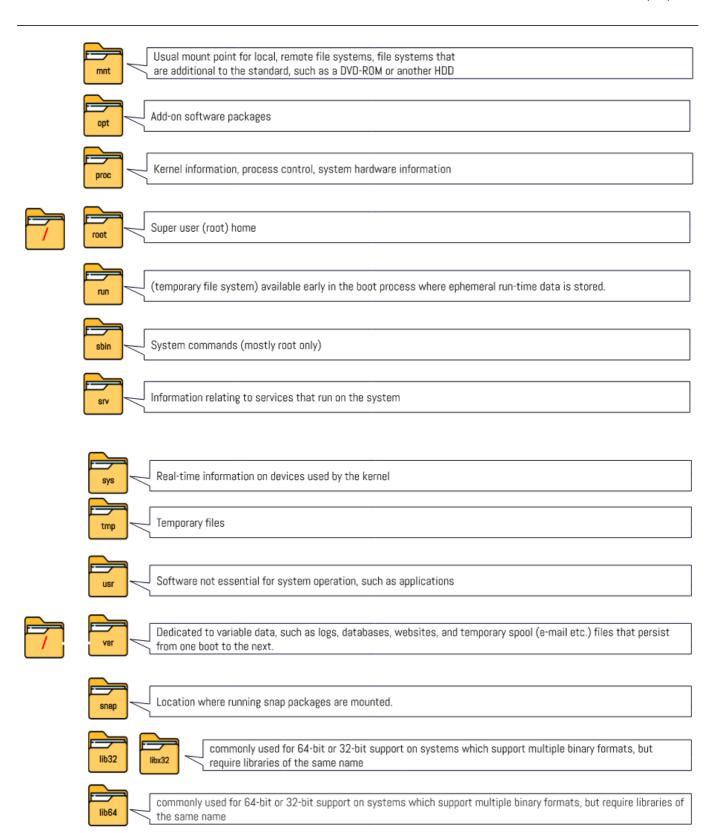
```
1: mmedina@cis106: ~/practicels ~
mmedina@cis106:~$ pwd
/home/mmedina
mmedina@cis106:~$
                   get https://cis106.com/assets/practicels.tar.xz
--2023-04-25 00:59:10--
                        https://cis106.com/assets/practicels.tar.xz
Resolving cis106.com (cis106.com)... 185.199.108.153
Connecting to cis106.com (cis106.com)|185.199.108.153|:443... connected.
             ent, awaiting response... 200 OK
HTTP request
Length: 2229212 (2.1M) [application/x-xz]
Saving to: 'practicels.tar.xz'
practicels.tar.xz
                  in 0.1s
2023-04-25 00:59:10 (21.8 MB/s) - 'practicels.tar.xz' saved [2229212/2229212]
mmedina@cis106:~$ tar Jxf practicels.tar.xz
mmedina@cis106:~$ cd practicels/
mmedina@cis106:~/practicels$ ls
              history-debian.pdf movie.mp4
book.txt
countries.xml homework.docx
                                  people.csv tux-nobg.png
mmedina@cis106:~/practicels$ ls -a
         countries.xml
         history-debian.pdf people.csv
book.txt homework.docx
mmedina@cis106:~/practicels$ ls -l
total 2932
-rw-rw-r-- 1 mmedina mmedina
                               1043 Feb 27 2022 book.txt
                              23972 Feb 27 2022 countries.xml
rw-rw-r-- 1 mmedina mmedina
rw-rw-r-- 1 mmedina mmedina 163057 Feb 27 2022 history-debian.pdf
rw-rw-r-- 1 mmedina mmedina
                             111303 Feb 22 2022 homework.docx
rw-rw-r-- 1 mmedina mmedina 1570024 Feb 27
                                           2022 movie.mp4
rw-rw-r-- 1 mmedina mmedina 284042 Feb 27 2022 people.csv
   rw-r-- 1 mmedina mmedina 764176 Feb 27 2022 song.mp3
 rw-rw-r-- 1 mmedina mmedina
                                            2022 tux-nobg.png
                              21314 Feb 27
   rw-r-- 1 mmedina mmedina
                              44299 Jan 31 2020 tux-penguin.gif
```

```
total 2.9M
-rw-rw-r-- 1 mmedina mmedina 1.1K Feb 27
                                          2022 book.txt
rw-rw-r-- 1 mmedina mmedina 24K Feb 27
                                          2022 countries.xml
                     mmedina 160K Feb 27
                                          2022 history-debian.pdf
                           a 109K Feb 22
                                          2022 homework.docx
rw-rw-r-
                    mmedina 1.5M Feb 27
                                          2022 movie.mp4
                    mmedina 278K Feb 27
                                          2022 people.csv
                     mmedina 747K Feb 27
                                          2022 song.mp3
            mmedina mmedina 21K Feb 27
                                          2022 tux-nobg.png
-rw-rw-r-- 1 mmedina mmedina 44K Jan 31
                                          2020 tux-penguin
mmedina@cis106:~/practicels$ ls -lht
total 2.9M
-rw-rw-r-- 1 mmedina mmedina 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 mmedina mmedina 278K Feb 27
                                          2022 people.csv
-rw-rw-r-- 1 mmedina mmedina 747K Feb 27
                                          2022 song.mp3
-rw-rw-r-- 1 mmedina mmedina 1.5M Feb 27
                                          2022 movie.mp/
rw-rw-r-- 1 mmedina mmedina 160K Feb 27
                                          2022 history-debian.pdf
rw-rw-r-- 1 mmedina mmedina 21K Feb 27
                                          2022 tux-nobg.png
-rw-rw-r-- 1 mmedina mmedina 1.1K Feb 27
                                          2022 book.txt
-rw-rw-r-- 1 mmedina mmedina 109K Feb 22
                                          2022 homework.docx
-rw-rw-r-- 1 mmedina mmedina
                             44K Jan 31 2020 tux-penguin.gif
nmedina@cis106:~/practicels$ ls -lhgGs
total 2.9M
4.0K -rw-rw-r-- 1 1.1K Feb 27
                             2022 book.txt
24K -rw-rw-r-- 1 24K Feb 27
                              2022 countries.xml
160K -rw-rw-r-- 1 160K Feb 27
                             2022 history-debian.pdf
112K -rw-rw-r-- 1 109K Feb 22
                              2022 homework.docx
1.5M -rw-rw-r-- 1 1.5M Feb 27
                               2022 movie.mp4
280K -rw-rw-r-- 1 278K Feb 27
                               2022 people.csv
748K -rw-rw-r-- 1 747K Feb 27
                               2022 song.mp3
24K -rw-rw-r-- 1 21K Feb 27 2022 tux-nobg.png
44K -rw-rw-r-- 1 44K Jan 31
                               2020 tux-penguin.gif
mmedina@cis106:~/practicels$ ls -mr
tux-penguin.gif, tux-nobg.png, song.mp3, people.csv, movie.mp4, homework.docx,
history-debian.pdf, countries.xml, book.txt
 medina@cis106:~/practicels$ ls -mr
ux-penguin.gif, tux-nobg.png, song.mp3, people.csv, movie.mp4, homework.docx,
history-debian.pdf, countries.xml, book.txt
mmedina@cis106:~/practicels$ ls -lX
total 2932
-rw-rw-r-- 1 mmedina mmedina 284042 Feb 27
                                             2022 people.csv
rw-rw-r-- 1 mmedina mmedina 111303 Feb 22 2022 homework.docx
                              44299 Jan 31
rw-rw-r-- 1 mmedina mmedina
                                             2020 tux-penguin.gif
rw-rw-r-- 1 mmedina mmedina 764176 Feb 27 2022 song.mp3
-rw-rw-r-- 1 mmedina mmedina 1570024 Feb 27
                                            2022 movie.mp4
rw-rw-r-- 1 mmedina mmedina 163057 Feb 27
                                             2022 history-debian.pdf
rw-rw-r-- 1 mmedina mmedina
                               21314 Feb 27
                                             2022 tux-nobg.png
-rw-rw-r-- 1 mmedina mmedina
                               1043 Feb 27
                                             2022 book.txt
-rw-rw-r-- 1 mmedina mmedina
                               23972 Feb 27
                                             2022 countries.xml
mmedina@cis106:~/practicels$
```

The Linux File System Directories and Their Purpose:

## Linux Filesystem | an upside down tree





## Table Of All the Commands for Navigating the Filesystem

The Command	What The Command Does	The Syntax	Example
ls	displays the files inside a	ls + option +	ls book.txt #list books in
	given directory	directory to list	from the text file

The Command	What The Command Does	The Syntax	Example
cd	used for changing the current working directory	cd + destination	cd \$HOME #brings you to your home directory
pwd	used for displaying the current working directory	pwd	pwd #command shows /home/mmedina

## **Basic Terminology**

File system - the way files are stored and organized

Current directory- the directory where you are at the moment

parent directory- the directory containing the current directory

Difference between **YOUR HOME** directory and **THE HOME** directory - "THE HOME" comes with everything under the root directory. - "YOUR HOME" contains the user's data.

pathname- indicates the location of the file in the filesystem

relative path- the location of a file starting from the current working directory or a directory that is located inside the current working directory

absolute path- the location of a file starting at the root of the file system