Week Report 4

Practice from the presentation The Linux File system:

Practice 1

Practice 2

```
evreynoso@cis106:~$ wget https://cis106.com/assets/practicels.tar.xz
--2023-10-27 16:57:08--  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.
HTTP request sent, awaiting response... 200 OK
Length: 2229212 (2.1M) [application/x-xz]
Saving to: 'practicels.tar.xz'

practicels.tar.xz   100%[====================>]   2.12M  11.5MB/s    in 0.2s

2023-10-27 16:57:09 (11.5 MB/s) - 'practicels.tar.xz' saved [2229212/2229212]

evreynoso@cis106:~$ tar Jxf practicels.tar.xz
evreynoso@cis106:~$ cd practicels/
evreynoso@cis106:~/practicels$ ls
book.txt        history-debian.pdf   movie.mp4    song.mp3       tux-penguin.gif
countries.xml   homework.docx        people.csv   tux-nobg.png
evreynoso@cis106:~/practicels$ ls -a
.           countries.xml        movie.mp4    tux-nobg.png
..          history-debian.pdf   people.csv   tux-penguin.gif
book.txt    homework.docx        song.mp3
evreynoso@cis106:~/practicels$ 
```

```
evreynoso@cis106:~/practicels$ ls -l
total 2932
-rw-rw-r-- 1 evreynoso evreynoso    1043 feb 27  2022 book.txt
-rw-rw-r-- 1 evreynoso evreynoso   23972 feb 27  2022 countries.xml
-rw-rw-r-- 1 evreynoso evreynoso  163057 feb 27  2022 history-debian.pdf
-rw-rw-r-- 1 evreynoso evreynoso  111303 feb 22  2022 homework.docx
-rw-rw-r-- 1 evreynoso evreynoso 1570024 feb 27  2022 movie.mp4
-rw-rw-r-- 1 evreynoso evreynoso  284042 feb 27  2022 people.csv
-rw-rw-r-- 1 evreynoso evreynoso  764176 feb 27  2022 song.mp3
-rw-rw-r-- 1 evreynoso evreynoso   21314 feb 27  2022 tux-nobg.png
-rw-rw-r-- 1 evreynoso evreynoso   44299 ene 31  2020 tux-penguin.gif
evreynoso@cis106:~/practicels$ ls -lh
total 2.9M
-rw-rw-r-- 1 evreynoso evreynoso 1.1K feb 27  2022 book.txt
-rw-rw-r-- 1 evreynoso evreynoso  24K feb 27  2022 countries.xml
-rw-rw-r-- 1 evreynoso evreynoso 160K feb 27  2022 history-debian.pdf
-rw-rw-r-- 1 evreynoso evreynoso 109K feb 22  2022 homework.docx
-rw-rw-r-- 1 evreynoso evreynoso 1.5M feb 27  2022 movie.mp4
-rw-rw-r-- 1 evreynoso evreynoso 278K feb 27  2022 people.csv
-rw-rw-r-- 1 evreynoso evreynoso 747K feb 27  2022 song.mp3
-rw-rw-r-- 1 evreynoso evreynoso  21K feb 27  2022 tux-nobg.png
-rw-rw-r-- 1 evreynoso evreynoso  44K ene 31  2020 tux-penguin.gif
evreynoso@cis106:~/practicels$ 
```

```
evreynoso@cis106:~/practicels$ ls -lht
total 2.9M
-rw-rw-r-- 1 evreynoso evreynoso  24K feb 27  2022 countries.xml
-rw-rw-r-- 1 evreynoso evreynoso 278K feb 27  2022 people.csv
-rw-rw-r-- 1 evreynoso evreynoso 747K feb 27  2022 song.mp3
-rw-rw-r-- 1 evreynoso evreynoso 1.5M feb 27  2022 movie.mp4
-rw-rw-r-- 1 evreynoso evreynoso 160K feb 27  2022 history-debian.pdf
-rw-rw-r-- 1 evreynoso evreynoso  21K feb 27  2022 tux-nobg.png
-rw-rw-r-- 1 evreynoso evreynoso 1.1K feb 27  2022 book.txt
-rw-rw-r-- 1 evreynoso evreynoso 109K feb 22  2022 homework.docx
-rw-rw-r-- 1 evreynoso evreynoso  44K ene 31  2020 tux-penguin.gif
evreynoso@cis106:~/practicels$ ls -lhgGS
total 2.9M
-rw-rw-r-- 1 1.5M feb 27  2022 movie.mp4
-rw-rw-r-- 1 747K feb 27  2022 song.mp3
-rw-rw-r-- 1 278K feb 27  2022 people.csv
-rw-rw-r-- 1 160K feb 27  2022 history-debian.pdf
-rw-rw-r-- 1 109K feb 22  2022 homework.docx
-rw-rw-r-- 1  44K ene 31  2020 tux-penguin.gif
-rw-rw-r-- 1  24K feb 27  2022 countries.xml
-rw-rw-r-- 1  21K feb 27  2022 tux-nobg.png
-rw-rw-r-- 1 1.1K feb 27  2022 book.txt
evreynoso@cis106:~/practicels$ 
```

```
evreynoso@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
evreynoso@cis106:~/practicels$ ls -IX
book.txt         history-debian.pdf  movie.mp4   song.mp3      tux-penguin.gif
countries.xml    homework.docx       people.csv  tux-nobg.png
evreynoso@cis106:~/practicels$ 
```

Practice 3

```
evreynoso@cis106:~$ pwd
/home/evreynoso
evreynoso@cis106:~$ cd
evreynoso@cis106:~$ cd /
evreynoso@cis106:/$ cd usr/share/themes
evreynoso@cis106:/usr/share/themes$ cd ../../
evreynoso@cis106:/usr$ ls -A ~
.bash_history    .gitconfig              .ssh
.bash_logout     .gnupg                  .sudo_as_admin_successful
.bashrc          Imágenes                Templates
.cache           lab4files               ubuntu
cis106           .lesshst                .vboxclient-clipboard-tty2-control.pid
.cis106.png      .local                  .vboxclient-clipboard-tty2-service.pid
.claws-mail      Mail                    .vboxclient-draganddrop-tty2-control.pid
.config          Music                   .vboxclient-draganddrop-tty2-service.pid
Descargas        .pam_environment        .vboxclient-hostversion-tty2-control.pid
Desktop          Pictures                .vboxclient-seamless-tty2-control.pid
Documentos       .pki                    .vboxclient-seamless-tty2-service.pid
Documents        practicels              .vboxclient-vmsvga-session-tty2-control.pid
.dotnet          practicels.tar.xz       .vboxclient-vmsvga-session-tty2-service.pid
Downloads        .profile                Videos
Escritorio       Public                  .vscode
.fonts           snap
evreynoso@cis106:/usr$
```

```
1. evreynoso@cis106: ~

evreynoso@cis106:~$ ls -rR ~/cis106/
/home/evreynoso/cis106/:
WeeksReports  labs  CheatSheets

/home/evreynoso/cis106/WeeksReports:
 wr4.practice3.png     wr4.practice2.2.png    wr4.md
 wr4.practice2.png     wr4.practice2.1.png   ' wr3.pdf'
 wr4.practice2.3.png   wr4.practice1.png     ' wr3.md'

/home/evreynoso/cis106/labs:
lab4  lab3  lab2  lab1

/home/evreynoso/cis106/labs/lab4:
lab4.pdf        lab4.5.1.png  lab4.4.3.png  lab4.2.3.png            lab4.2.1png
lab4.md         lab4.4.5.png  lab4.4.2.png  lab4.2.2.png            lab4.1.png
lab4.5.2.png  lab4.4.4.png  lab4.4.1.png  lab4.2.2.nextpart.png  lab4.1.2.png

/home/evreynoso/cis106/labs/lab3:
q2.1.png  q1.1.png  LibreOffice.pdf  LIbreimpress.odp  lab3.pdf  lab3.md

/home/evreynoso/cis106/labs/lab2:
Screenshot_9.png  Screenshot_6.png  Screenshot_10.png  lab2.md
Screenshot_7.png  Screenshot_5.png  lab2.pdf

/home/evreynoso/cis106/labs/lab1:
whatisubuntu.txt              what-is-ubuntu.pdf   johndoe.jpeg
what_is_ubuntu_submission.pdf  ubuntu-logo.png      johndoeinfo.txt
```

```
1: evreynoso@cis106: ~ ∨

evreynoso@cis106:~$ pwd
/home/evreynoso
evreynoso@cis106:~$ ls -lh ~
total 2.2M
drwxrwxr-x 6 evreynoso evreynoso 4.0K oct 12 23:21 cis106
drwxr-xr-x 2 evreynoso evreynoso 4.0K sep 24 02:03 Descargas
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct 12 23:21 Desktop
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct  9 02:34 Documentos
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct 10 19:39 Documents
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct 23 22:59 Downloads
drwxr-xr-x 3 evreynoso evreynoso 4.0K oct  9 04:18 Escritorio
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct 10 19:42 Imágenes
drwxrwxr-x 2 evreynoso evreynoso 4.0K feb 22  2022 lab4files
drwx------ 7 evreynoso evreynoso 4.0K oct 12 01:35 Mail
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct 10 19:39 Music
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct 12 00:26 Pictures
drwxrwxr-x 2 evreynoso evreynoso 4.0K feb 27  2022 practicels
-rw-rw-r-- 1 evreynoso evreynoso 2.2M oct 14 11:22 practicels.tar.xz
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct 10 19:39 Public
drwx------ 5 evreynoso evreynoso 4.0K sep 24 02:04 snap
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct 10 19:39 Templates
drwxrwxr-x 3 evreynoso evreynoso 4.0K sep 25 01:04 ubuntu
drwxr-xr-x 2 evreynoso evreynoso 4.0K oct 10 19:39 Videos
evreynoso@cis106:~$
```
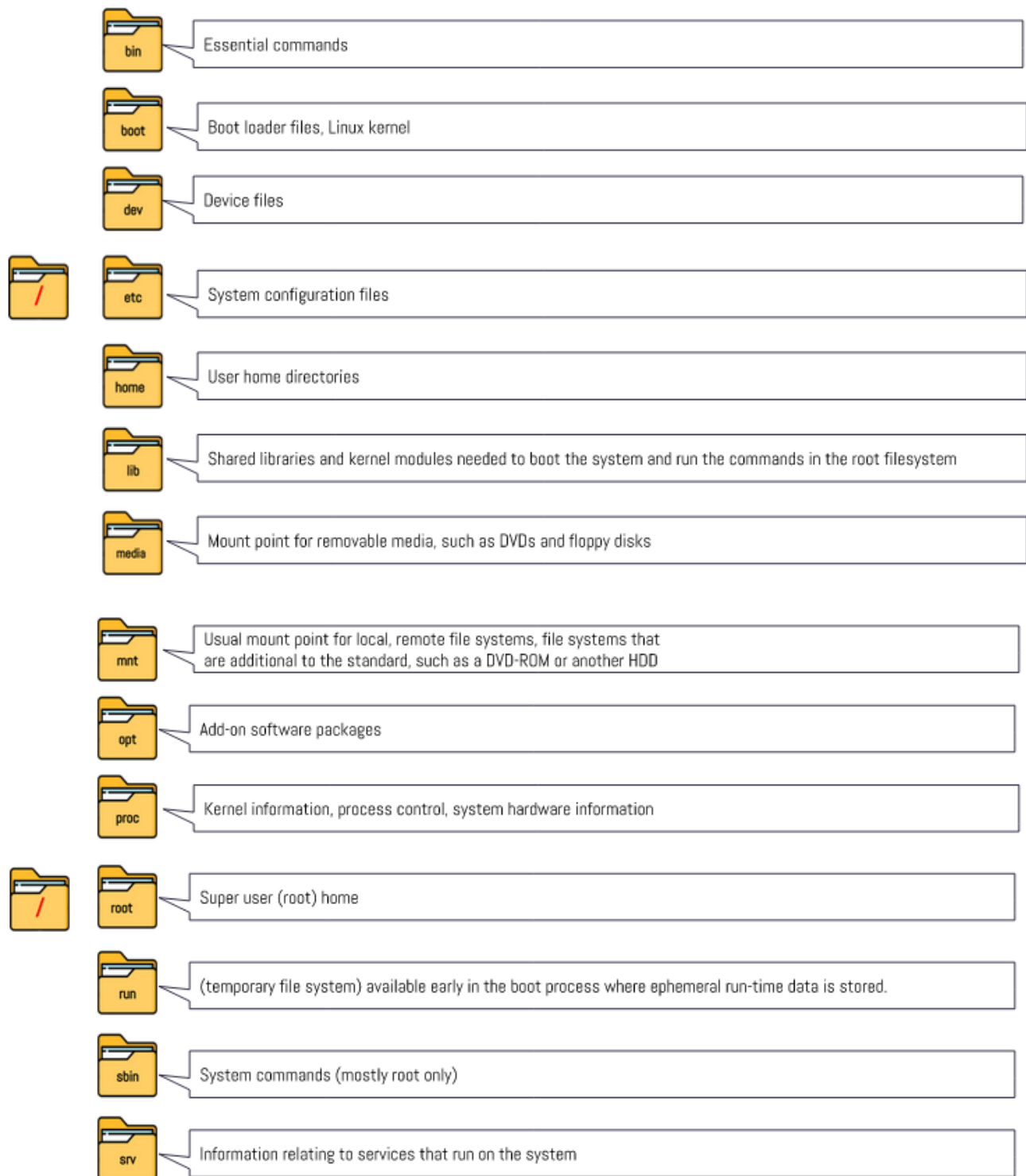
```
1: evreynoso@cis106: ~ ∨

evreynoso@cis106:~$ ls -lgG --full-time ~
total 2252
drwxrwxr-x 6    4096 2023-10-12 23:21:46.409266308 -0400 cis106
drwxr-xr-x 2    4096 2023-09-24 02:03:32.556643327 -0400 Descargas
drwxr-xr-x 2    4096 2023-10-12 23:21:46.409266308 -0400 Desktop
drwxr-xr-x 2    4096 2023-10-09 02:34:06.446081454 -0400 Documentos
drwxr-xr-x 2    4096 2023-10-10 19:39:14.004127927 -0400 Documents
drwxr-xr-x 2    4096 2023-10-23 22:59:11.526343377 -0400 Downloads
drwxr-xr-x 3    4096 2023-10-09 04:18:59.274081454 -0400 Escritorio
drwxr-xr-x 2    4096 2023-10-10 19:42:27.503329850 -0400 Imágenes
drwxrwxr-x 2    4096 2022-02-22 14:18:06.000000000 -0500 lab4files
drwx------ 7    4096 2023-10-12 01:35:38.454481319 -0400 Mail
drwxr-xr-x 2    4096 2023-10-10 19:39:14.004127927 -0400 Music
drwxr-xr-x 2    4096 2023-10-12 00:26:09.290940342 -0400 Pictures
drwxrwxr-x 2    4096 2022-02-27 13:46:18.000000000 -0500 practicels
-rw-rw-r-- 1 2229212 2023-10-14 11:22:44.000000000 -0400 practicels.tar.xz
drwxr-xr-x 2    4096 2023-10-10 19:39:14.000129926 -0400 Public
drwx------ 5    4096 2023-09-24 02:04:03.864289330 -0400 snap
drwxr-xr-x 2    4096 2023-10-10 19:39:14.000129926 -0400 Templates
drwxrwxr-x 3    4096 2023-09-25 01:04:37.485353470 -0400 ubuntu
drwxr-xr-x 2    4096 2023-10-10 19:39:14.008125927 -0400 Videos
evreynoso@cis106:~$
```

The Linux File system directories and their purpose:

	Essential commands
	Boot loader files, Linux kernel
	Device files
	System configuration files
	User home directories
	Shared libraries and kernel modules needed to boot the system and run the commands in the root filesystem
	Mount point for removable media, such as DVDs and floppy disks
	Usual mount point for local, remote file systems, file systems that are additional to the standard, such as a DVD-ROM or another HDD
	Add-on software packages
	Kernel information, process control, system hardware information
	Super user (root) home
	(temporary file system) available early in the boot process where ephemeral run-time data is stored.
	System commands (mostly root only)
	Information relating to services that run on the system

All the commands for navigating the filesystem:

Command	What it does	Syntax	Example
pwd	Print the full filename of the current working directory.	pwd [OPTION]...	pwd
cd	Command for change directory.	cd Directory_name	cd /home/
ls	List information about the files (the current directory by default).	ls [OPTION]... [FILE]...	ls -l /home

Basic terminology

- **File system:** *The way files are stored and organized*

- **Current directory:** *is the directory where commands and file operations are currently executed in a file system.*

- **parent directory:** *a directory that contains more folders subdirectories*

- **the difference between your home directory and the home directory:** *"Your Home Directory" refers to the home directory associated with the currently logged in user. and "The Home Directory" is a more general reference to the concept of home directories on the system*

- **pathname:** *a pathname is a string that specifies the location of a file or directory within the file system.*

- **relative path:** *the location of a file relative to the current working directory*

- **absolute path:** *the location of a file or directory from the root directory*