

# Week Report 4

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Practice from the presentation The Linux File system:

## Practice 1

```
vlgarcia@cis106:~$ pwd
/home/vlgarcia
vlgarcia@cis106:~$ cd /home/$USER/Downloads/
vlgarcia@cis106:~/Downloads$ pwd
/home/vlgarcia/Downloads
vlgarcia@cis106:~/Downloads$ cd ..
vlgarcia@cis106:~$ cd ../../
vlgarcia@cis106:/$ pwd
/
vlgarcia@cis106:/$ cd -
/home/vlgarcia
vlgarcia@cis106:~$
```

## Practice 2

```
vlgarcia@cis106:~$ wget https://cis106.com/assets/practicels.tar.xz
--2023-10-26 17:44:30-- 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  1.67MB/s  in 1.3s

2023-10-26 17:44:31 (1.67 MB/s) - 'practicels.tar.xz' saved [2229212/2229212]
```

```
vlgarcia@cis106:~$ tar Jxf practicels.tar.xz
```

```
vlgarcia@cis106:~$ cd practicels/
```

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

```
vgarcia@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
```

```
vgarcia@cis106:~/practicels$ ls -l
total 2932
-rw-rw-r-- 1 vgarci vgarci    1043 Feb 27  2022 book.txt
-rw-rw-r-- 1 vgarci vgarci   23972 Feb 27  2022 countries.xml
-rw-rw-r-- 1 vgarci vgarci  163057 Feb 27  2022 history-debian.pdf
-rw-rw-r-- 1 vgarci vgarci  111303 Feb 22  2022 homework.docx
-rw-rw-r-- 1 vgarci vgarci 1570024 Feb 27  2022 movie.mp4
-rw-rw-r-- 1 vgarci vgarci  284042 Feb 27  2022 people.csv
-rw-rw-r-- 1 vgarci vgarci  764176 Feb 27  2022 song.mp3
-rw-rw-r-- 1 vgarci vgarci   21314 Feb 27  2022 tux-nobg.png
-rw-rw-r-- 1 vgarci vgarci   44299 Jan 31  2020 tux-penguin.gif
```

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

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

```
vgarcia@cis106:~/practicels$ ls -lhG
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 Jan 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
vgarcia@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
```

```
vgarcia@cis106:~/practicels$ ls -1X
people.csv
homework.docx
tux-penguin.gif
song.mp3
movie.mp4
history-debian.pdf
tux-nobg.png
book.txt
countries.xml
```

### Practice 3

```
vgarcia@cis106:~/practicels$ pwd
/home/vgarcia/practicels
```

```
vgarcia@cis106:~/practicels$ cd
vgarcia@cis106:~$ pwd
/home/vgarcia
```

```
vgarcia@cis106:~$ cd /
```

```
vgarcia@cis106:/$ cd /usr/share/themes
```

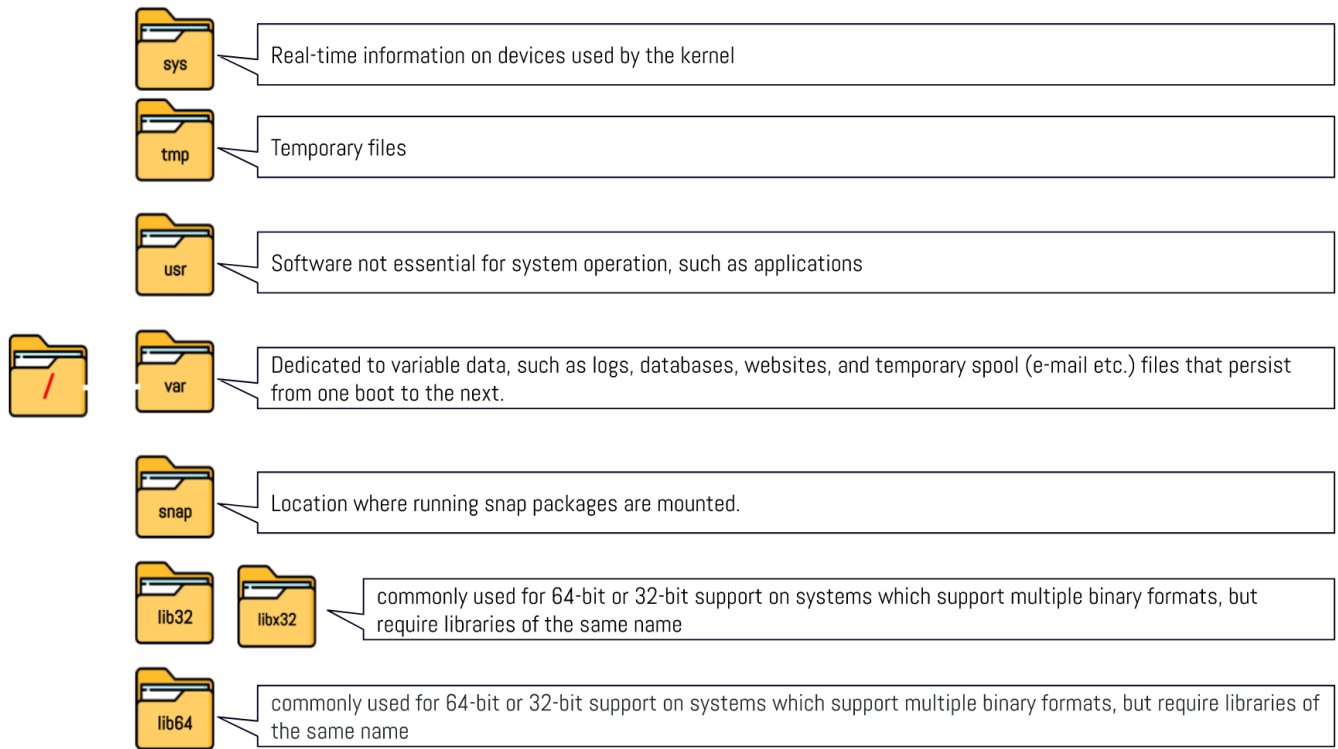
```
vgarcia@cis106:/usr/share/themes$ cd ../../
vgarcia@cis106:/usr$ ls -A ~
```

```
vgarcia@cis106:/usr$ ls -A ~
.bash_history      practicels.tar.xz
.bash_logout      .profile
.bashrc           Public
.cache            .python_history
cis106            snap
.config           .ssh
Desktop           .sudo_as_admin_successful
Documents         Templates
.dotnet           .vboxclient-clipboard-tty2-control.pid
Downloads         .vboxclient-clipboard-tty2-service.pid
gitcommands.txt  .vboxclient-draganddrop-tty2-control.pid
.gitconfig        .vboxclient-draganddrop-tty2-service.pid
.gnupg           .vboxclient-hostversion-tty2-control.pid
lab4files         .vboxclient-seamless-tty2-control.pid
.lesshst         .vboxclient-seamless-tty2-service.pid
.local           .vboxclient-vmtoolsd-session-tty2-control.pid
Music            .vboxclient-vmtoolsd-session-tty2-service.pid
oreo.png         Videos
Pictures         .vscode
pizza.txt        website
.pki             .xdp-cis106.png-NUGteX
pp_pizza.txt     .xdp-cis106.png-SFuq4D
practicels
```

```
vgarcia@cis106:/usr$ cd; ls -tx https://github.com/lgarcvan/cis106/
ls: cannot access 'https://github.com/lgarcvan/cis106/': No such file or directory
vgarcia@cis106:~$ cd; ls -tx https://github.com/lgarcvan/cis106/
ls: cannot access 'https://github.com/lgarcvan/cis106/': No such file or directory
vgarcia@cis106:~$ cd; ls -tx https://github.com/lgarcvan/cis106.git
ls: cannot access 'https://github.com/lgarcvan/cis106.git': No such file or directory
vgarcia@cis106:~$ cd; ls -tx wget https://github.com/lgarcvan/cis106.git
ls: cannot access 'wget': No such file or directory
ls: cannot access 'https://github.com/lgarcvan/cis106.git': No such file or directory
vgarcia@cis106:~$
```

The Linux File system directories and their purpose:





## All the commands we use for navigating the file system

Command	What is does	Syntax	Example
pwd	print current directory	pwd	'pwd'
CD	changes the present working directory	cd [source] [destination]	cd
ls	list all files & directories in a given directory	ls [options] [files]	ls

## Basic Terminology

- File system the way files are stored & organized
- Current directory directory where you are at the moment or present working directory
- parent directory move forward to a subdirectory or backwards to previous directory
- The difference between your home directory and the home directory? Home directory is the default working directory when a user logs in. Present working directory is user current directory. Working directory can be changed by cd command.
- pathname in a filesystem every file has pathname which indicates location of file in filesystem (address)
- Relative path location or a directory that is located inside current working directory EX: Downloads/songs.mp3
- Absolute path location of a file starting at root of FS EX: /home/john/Downloads/songs.mp3