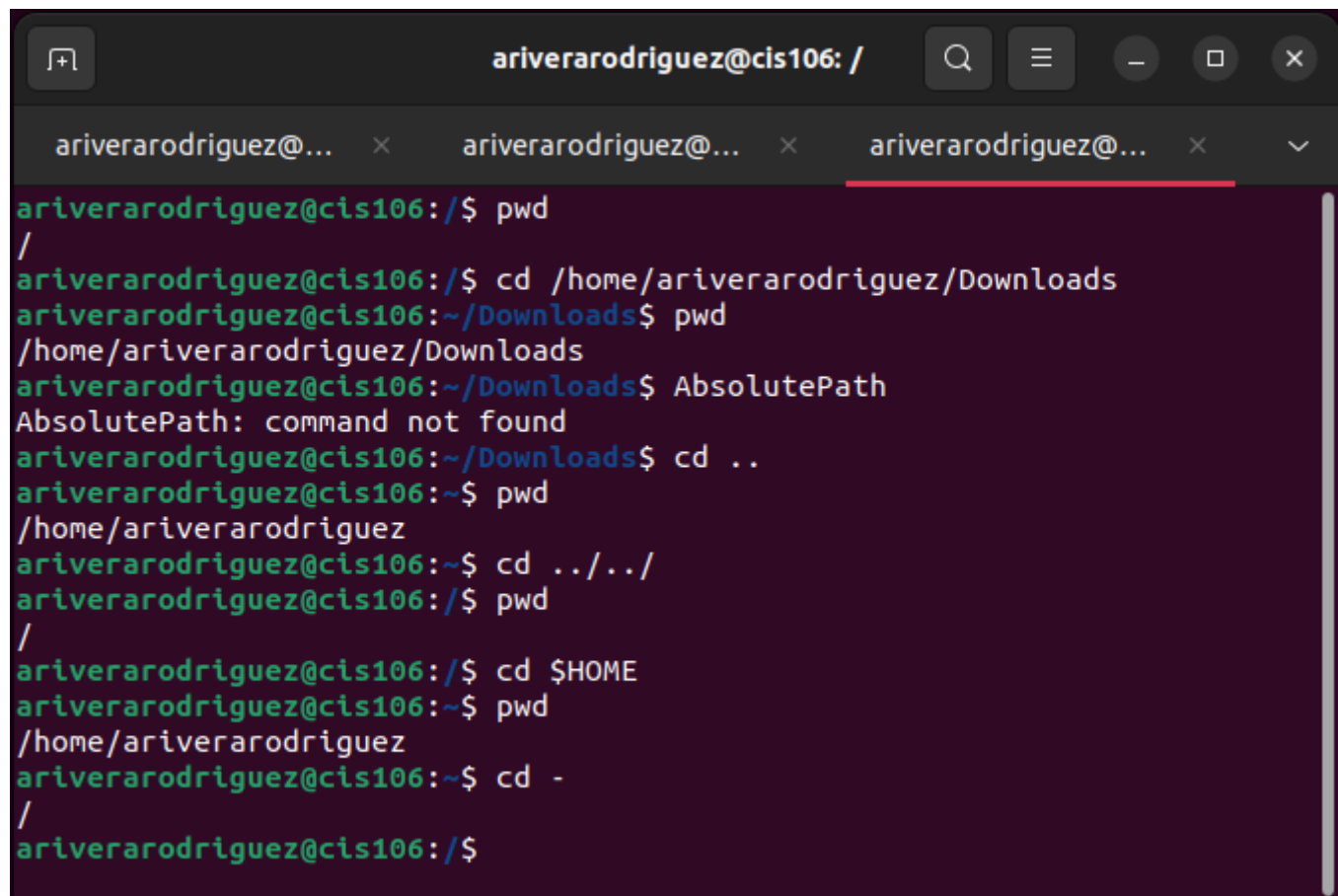


Week Report 4

Practice From the Presentation The Linux File System:

Practice 1



```
ariverarodriguez@cis106: /
ariverarodriguez@cis106:/$ pwd
/
ariverarodriguez@cis106:/$ cd /home/ariverarodriguez/Downloads
ariverarodriguez@cis106:~/Downloads$ pwd
/home/ariverarodriguez/Downloads
ariverarodriguez@cis106:~/Downloads$ AbsolutePath
AbsolutePath: command not found
ariverarodriguez@cis106:~/Downloads$ cd ..
ariverarodriguez@cis106:~$ pwd
/home/ariverarodriguez
ariverarodriguez@cis106:~$ cd ../../
ariverarodriguez@cis106:/$ pwd
/
ariverarodriguez@cis106:/$ cd $HOME
ariverarodriguez@cis106:~$ pwd
/home/ariverarodriguez
ariverarodriguez@cis106:~$ cd -
/
ariverarodriguez@cis106:/$
```

Practice 2

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

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

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

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

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

```
ariverarodriguez@cis106: ~/practicels
ariverarodriguez@cis106: ~/practicels
ariverarodriguez@cis106:~/practicels$ pwd
/home/ariverarodriguez/practicels
ariverarodriguez@cis106:~/practicels$ ls -lhgS
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
ariverarodriguez@cis106:~/practicels$
```

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

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

Practice 3 (Challenge Practice)

```

ariverarodriguez@cis106: /usr
ariverarodriguez@cis106:~$ pwd
/home/ariverarodriguez
ariverarodriguez@cis106:~$ cd
ariverarodriguez@cis106:~$ cd /
ariverarodriguez@cis106:/$ cd usr/share/themes
ariverarodriguez@cis106:/usr/share/themes$ cd ../../
ariverarodriguez@cis106:/usr$ ls -A ~
.balsa                .gitconfig            .sudo_as_admin_successful
.bash_history          .gnupg                Templates
.bash_logout           .lessht               .vboxclient-clipboard-tty2-control.pid
.bashrc                .local                .vboxclient-clipboard-tty2-service.pid
.cache                 mail                   .vboxclient-draganddrop-tty2-control.pid
cis106                 mailbox               .vboxclient-draganddrop-tty2-service.pid
.cis106.png            Music                  .vboxclient-hostversion-tty2-control.pid
.config                Pictures               .vboxclient-seamless-tty2-control.pid
cosmiclatte.odt        .pki                   .vboxclient-seamless-tty2-service.pid
Desktop                practicels             .vboxclient-vmvga-session-tty2-control.pid
Documents              practicels.tar.xz      .vboxclient-vmvga-session-tty2-service.pid
.dotnet                .profile              Videos
Downloads              Public                 .vscode
.fonts                 snap
gitcommands.txt        .ssh
ariverarodriguez@cis106:/usr$

```

```

ariverarodriguez@cis106: ~
/home/ariverarodriguez/cis106/labs:
lab3 lab2 lab1

/home/ariverarodriguez/cis106/labs/lab3:
q2.1.png q1.1.png lab3.md cosmiclatte.pdf
q1.2.png lab3.pdf FirstLibreOfficePPT.odp

/home/ariverarodriguez/cis106/labs/lab2:
VirtualBoxSettings.png lab2.pdf
UbuntuRestartNow.png lab2.md
taskmanager.png devicespecifications.png
snapshotGuestAdditionsInstalled.png

/home/ariverarodriguez/cis106/labs/lab1:
whatisubuntu.txt resume.png
what_is_ubuntu_submission.pdf johndoeresume-submission.pdf
what_is_ubuntu_submission.md johndoeresume-submission.md
what-is-ubuntu.pdf johndoe.jpeg
ubuntu-logo.png johndoeinfo.txt
ubuntu-desktop.png

/home/ariverarodriguez/cis106/cheatSheets:
'Linux Workshop Ubuntu Software installation cheat sheet.png'
ariverarodriguez@cis106:~$

```



```

ariverarodriguez@cis106: ~
ariverarodrig... x ariverarodrig... x ariverarodrig... x ariverarodrig... x
ariverarodriguez@cis106:~$ ls -lh ~
total 2.2M
drwxrwxr-x 6 ariverarodriguez ariverarodriguez 4.0K Oct 27 21:44 cis106
-rw-rw-r-- 1 ariverarodriguez ariverarodriguez 18K Oct 27 22:23 cosmiclatte.odt
drwxr-xr-x 3 ariverarodriguez ariverarodriguez 4.0K Oct 30 01:19 Desktop
drwxr-xr-x 2 ariverarodriguez ariverarodriguez 4.0K Oct 28 01:34 Documents
drwxr-xr-x 2 ariverarodriguez ariverarodriguez 4.0K Oct 30 01:17 Downloads
-rw-rw-r-- 1 ariverarodriguez ariverarodriguez 91 Oct 27 11:41 gitcommands.txt
drwx----- 2 ariverarodriguez ariverarodriguez 4.0K Oct 29 23:05 mail
-rw----- 1 ariverarodriguez ariverarodriguez 0 Oct 29 23:05 mailbox
drwxr-xr-x 2 ariverarodriguez ariverarodriguez 4.0K Oct 27 10:27 Music
drwxr-xr-x 2 ariverarodriguez ariverarodriguez 4.0K Oct 27 23:46 Pictures
drwxrwxr-x 2 ariverarodriguez ariverarodriguez 4.0K Feb 27 2022 practicels
-rw-rw-r-- 1 ariverarodriguez ariverarodriguez 2.2M Oct 14 11:22 practicels.tar.
xz
drwxr-xr-x 2 ariverarodriguez ariverarodriguez 4.0K Oct 27 10:27 Public
drwx----- 5 ariverarodriguez ariverarodriguez 4.0K Oct 27 11:02 snap
drwxr-xr-x 2 ariverarodriguez ariverarodriguez 4.0K Oct 27 10:27 Templates
drwxr-xr-x 2 ariverarodriguez ariverarodriguez 4.0K Oct 27 10:27 Videos
ariverarodriguez@cis106:~$

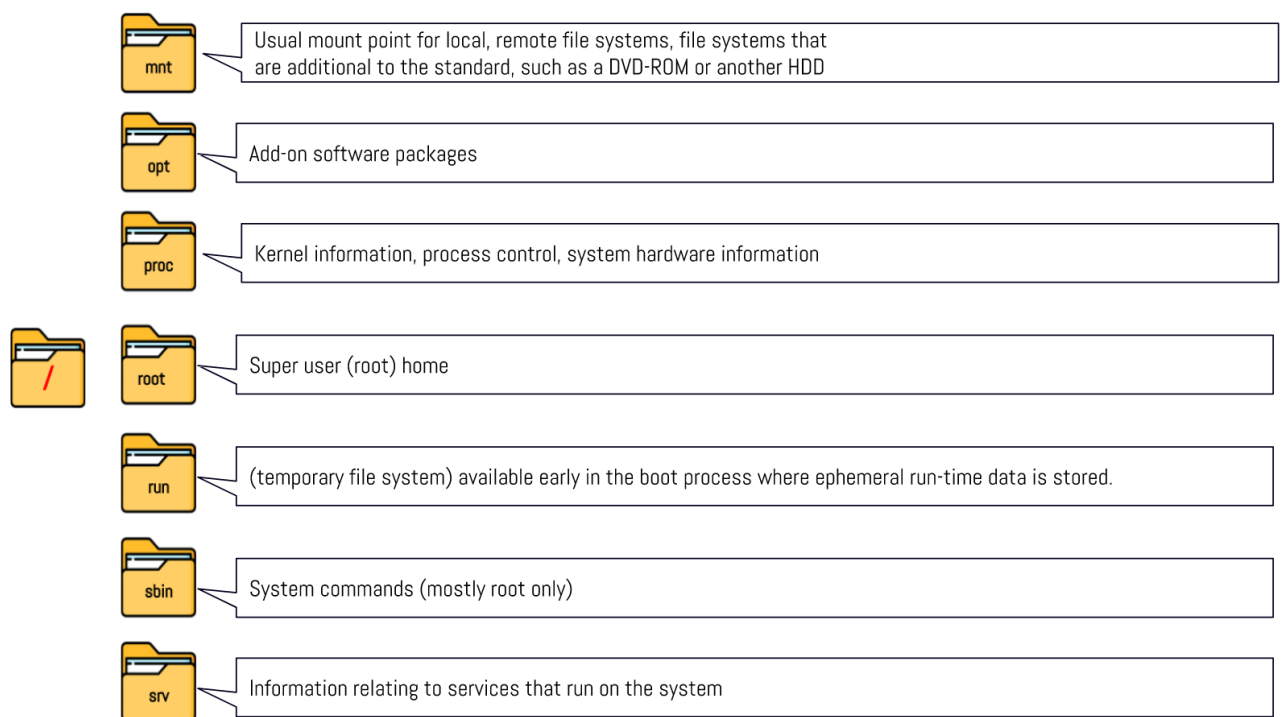
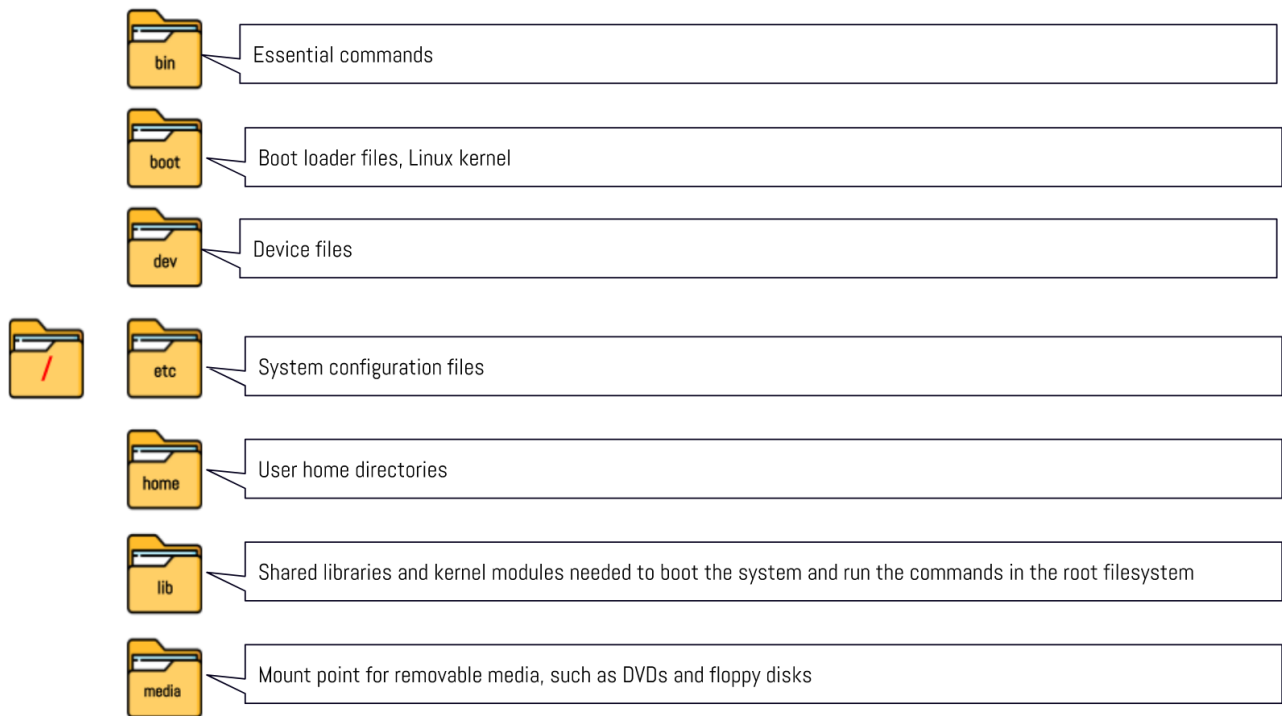
```

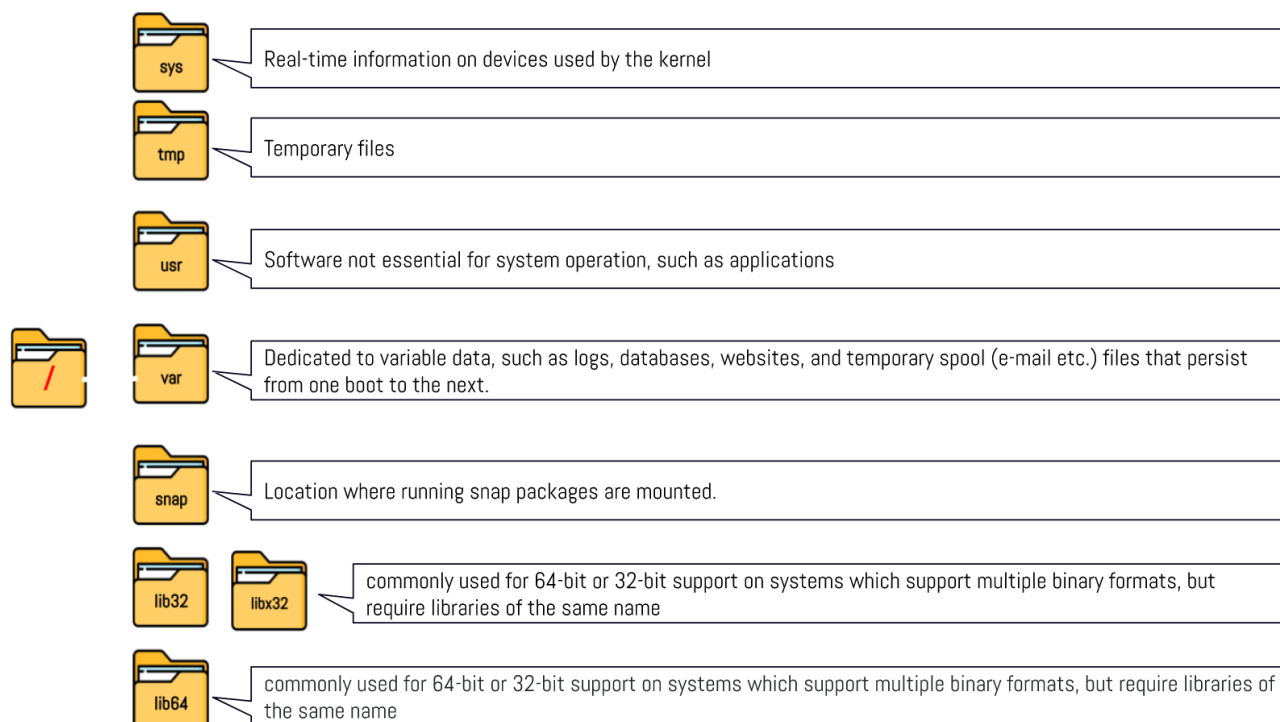
```

ariverarodriguez@cis106: ~
ariverarodrig... x ariverarodrig... x ariverarodrig... x ariverarodrig... x
ariverarodriguez@cis106:~$ ls -lgG --full-time ~
total 2252
drwxrwxr-x 6 4096 2023-10-27 21:44:09.497866740 -0400 cis106
-rw-rw-r-- 1 17952 2023-10-27 22:23:52.254140110 -0400 cosmiclatte.odt
drwxr-xr-x 3 4096 2023-10-30 01:19:01.557653994 -0400 Desktop
drwxr-xr-x 2 4096 2023-10-28 01:34:19.677999871 -0400 Documents
drwxr-xr-x 2 4096 2023-10-30 01:17:41.809653994 -0400 Downloads
-rw-rw-r-- 1 91 2023-10-27 11:41:14.641204375 -0400 gitcommands.txt
drwx----- 2 4096 2023-10-29 23:05:00.537744364 -0400 mail
-rw----- 1 0 2023-10-29 23:05:00.537744364 -0400 mailbox
drwxr-xr-x 2 4096 2023-10-27 10:27:51.359978869 -0400 Music
drwxr-xr-x 2 4096 2023-10-27 23:46:24.628468185 -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 2023-10-27 10:27:51.359978869 -0400 Public
drwx----- 5 4096 2023-10-27 11:02:11.426181755 -0400 snap
drwxr-xr-x 2 4096 2023-10-27 10:27:51.359978869 -0400 Templates
drwxr-xr-x 2 4096 2023-10-27 10:27:51.359978869 -0400 Videos
ariverarodriguez@cis106:~$

```

The Linux File System Directories And Their Purpose:





All The Commands For Navigating The Filesystem:

Command	What it does	Syntax	Example
<code>pwd</code>	Prints current working directory	<code>pwd</code>	<code>pwd</code>
<code>cd</code>	Changes the current working directory to Home	<code>cd + destination</code>	<code>cd</code> or <code>cd ~</code> or <code>cd \$HOME</code> or <code>cd ariverarodriguez</code>
	Changes the current working directory - Prev working directory	<code>cd + destination</code>	<code>cd -</code>
	Change from current working directory to a different directory	<code>cd + destination</code>	<code>cd Downloads</code> or <code>cd ~/Downloads</code>
	Go back one or more directories	<code>cd + ..</code>	Go back 1: <code>cd ../</code> / Go back 2: <code>cd ../../</code>
<code>ls</code>	Displays all the files inside a given directory	<code>ls + option + directory to list</code>	<code>ls</code>
	List all the files inside the current working directory including hidden files	<code>ls + option + directory to list</code>	<code>ls -a</code>
	List all the files inside the current working directory	<code>ls + option + directory to list</code>	<code>ls -a ~/Pictures</code>

Command	What it does	Syntax	Example
	"" sorted by last modified	<code>ls + option + directory to list</code>	<code>ls -t ~/Documents</code>
	"" sorted by file size	<code>ls + option + directory to list</code>	<code>ls -s ~/Documents</code>
	"" sorted by extension	<code>ls + option + directory to list</code>	<code>ls -x ~/Documents</code>
	"" sorted by name descending	<code>ls + option + directory to list</code>	<code>ls -r ~/Documents</code>
	"" recursively	<code>ls + option + directory to list</code>	<code>ls -R ~/Documents</code>
	Lists all the options of ls command	<code>ls + --help</code>	<code>ls --help</code>

Basic Terminology

- **File system** The way files are stored and organized.
- **Current directory** The directory where you are at the moment
- **Parent directory** A directory that contains subfolders
- **The difference between your home directory and the home directory** Current working directory is home directory. The home directory is the root where you need administrator privileges.
- **pathname** indicates the location of the file in the filesystem (like an address)
- **relative path** The location of a file starting from the current working directory or a directory that is located inside the current working directory
 - Ex. Downloads/song.mp3
- **absolute path** the location of a file starting at the root of the file system
 - Ex. /home/john/Downloads/song.mp3