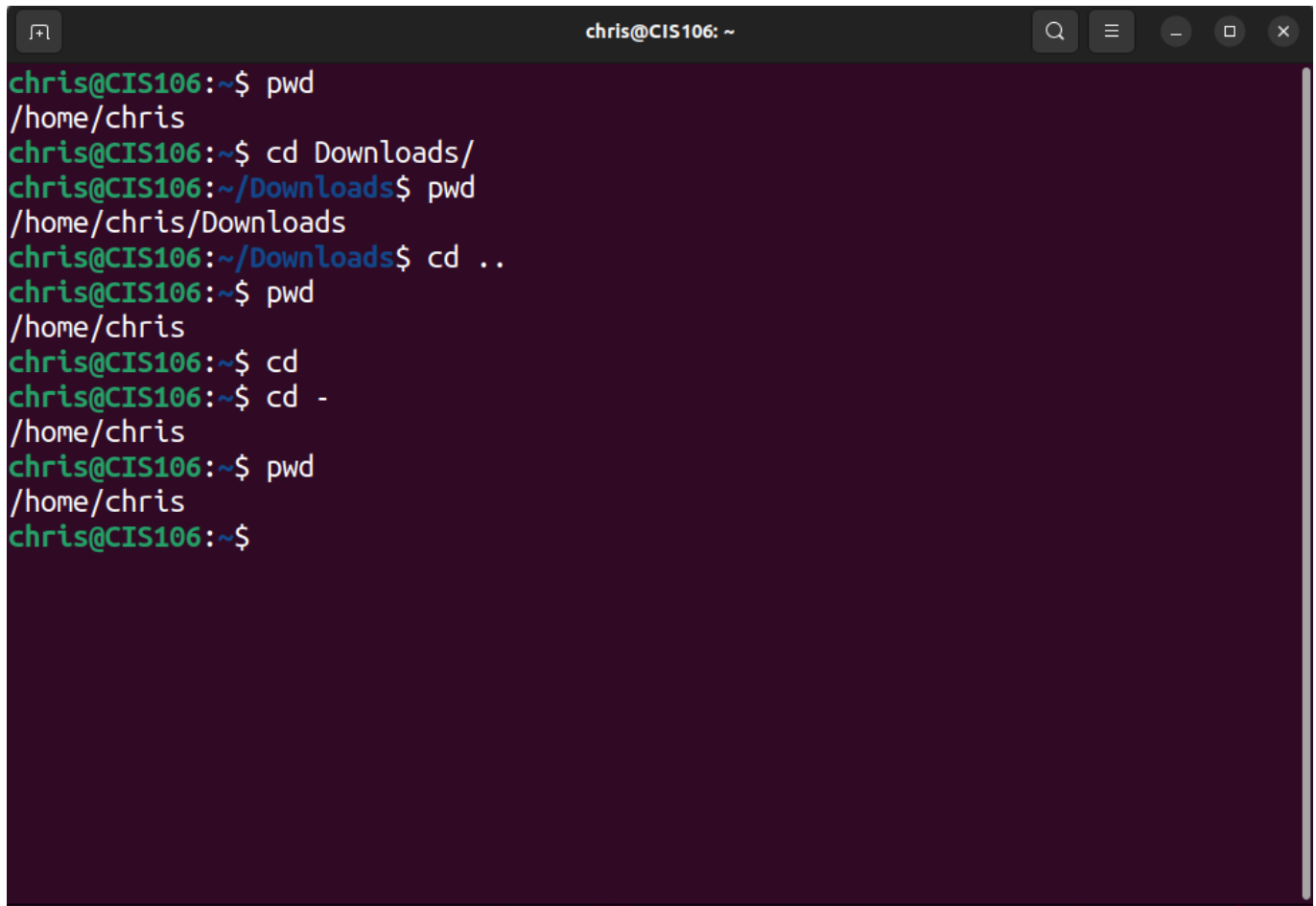


# Week Report 4

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## PRACTICE FROM THE PRESENTATION THE LINUX FILE SYSTEM:



```
chris@CIS106: ~  
chris@CIS106:~$ pwd  
/home/chris  
chris@CIS106:~$ cd Downloads/  
chris@CIS106:~/Downloads$ pwd  
/home/chris/Downloads  
chris@CIS106:~/Downloads$ cd ..  
chris@CIS106:~$ pwd  
/home/chris  
chris@CIS106:~$ cd  
chris@CIS106:~$ cd -  
/home/chris  
chris@CIS106:~$ pwd  
/home/chris  
chris@CIS106:~$
```

```

chris@CIS106:~$ wget https://cis106.com/assets/practicels.tar.xz
--2023-10-28 18:42:12-- 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  1.57MB/s   in 1.4s

2023-10-28 18:42:14 (1.57 MB/s) - 'practicels.tar.xz' saved [2229212/2229212]

chris@CIS106:~$ tar Jxf practicels.tar.xz
chris@CIS106:~$ cd practicel/
bash: cd: practicel/: No such file or directory
chris@CIS106:~$ cd practicels/
chris@CIS106:~/practicels$ ls
book.txt          history-debian.pdf  movie.mp4          song.mp3          tux-penguin.gif
countries.xml     homework.docx       people.csv         tux-nobg.png
chris@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
chris@CIS106:~/practicels$ ls -l

```

```

chris@CIS106: ~/practicels
..          history-debian.pdf  people.csv  tux-penguin.gif
book.txt    homework.docx      song.mp3
chris@CIS106:~/practicels$ ls -l
total 2932
-rw-rw-r-- 1 chris chris  1043 Feb 27  2022 book.txt
-rw-rw-r-- 1 chris chris 23972 Feb 27  2022 countries.xml
-rw-rw-r-- 1 chris chris 163057 Feb 27  2022 history-debian.pdf
-rw-rw-r-- 1 chris chris 111303 Feb 22  2022 homework.docx
-rw-rw-r-- 1 chris chris 1570024 Feb 27  2022 movie.mp4
-rw-rw-r-- 1 chris chris 284042 Feb 27  2022 people.csv
-rw-rw-r-- 1 chris chris 764176 Feb 27  2022 song.mp3
-rw-rw-r-- 1 chris chris 21314 Feb 27  2022 tux-nobg.png
-rw-rw-r-- 1 chris chris 44299 Jan 31  2020 tux-penguin.gif
chris@CIS106:~/practicels$ ls -lh
total 2.9M
-rw-rw-r-- 1 chris chris 1.1K Feb 27  2022 book.txt
-rw-rw-r-- 1 chris chris 24K Feb 27  2022 countries.xml
-rw-rw-r-- 1 chris chris 160K Feb 27  2022 history-debian.pdf
-rw-rw-r-- 1 chris chris 109K Feb 22  2022 homework.docx
-rw-rw-r-- 1 chris chris 1.5M Feb 27  2022 movie.mp4
-rw-rw-r-- 1 chris chris 278K Feb 27  2022 people.csv
-rw-rw-r-- 1 chris chris 747K Feb 27  2022 song.mp3
-rw-rw-r-- 1 chris chris 21K Feb 27  2022 tux-nobg.png
-rw-rw-r-- 1 chris chris 44K Jan 31  2020 tux-penguin.gif

```

```
-rw-rw-r-- 1 chris chris 44K Jan 31 2020 tux-penguin.gif
chris@CIS106:~/practicels$ ls -lht
total 2.9M
-rw-rw-r-- 1 chris chris 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 chris chris 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 chris chris 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 chris chris 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 chris chris 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 chris chris 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 chris chris 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 chris chris 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 chris chris 44K Jan 31 2020 tux-penguin.gif
chris@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
chris@CIS106:~/practicels$ ls -mr
```

```
-rw-rw-r-- 1 chris chris 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 chris chris 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 chris chris 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 chris chris 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 chris chris 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 chris chris 44K Jan 31 2020 tux-penguin.gif
chris@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
chris@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
chris@CIS106:~/practicels$ ls -lx
book.txt countries.xml history-debian.pdf homework.docx movie.mp4
people.csv song.mp3 tux-nobg.png tux-penguin.gif
chris@CIS106:~/practicels$ ~
```

```

chris@CIS106:~$ pwd
/home/chris
chris@CIS106:~$ cd
chris@CIS106:~$ cd /
chris@CIS106:/$ cd usr/share/themes/
chris@CIS106:/usr/share/themes$ cd ../../
chris@CIS106:/usr$ ls -A ~
bash_history      .lessshst          .sudo_as_admin_successful
bash_logout       .local              Templates
bashrc            .mozilla            .thunderbird
bread.txt          music                .vboxclient-clipboard-tty2-control.pid
cache             Music                .vboxclient-clipboard-tty2-service.pid
CIS106             oreo.png             .vboxclient-draganddrop-tty2-control.pid
CIS106.png         Pictures             .vboxclient-draganddrop-tty2-service.pid
config            pizza.txt            .vboxclient-hostversion-tty2-control.pid
desktop           .pki                 .vboxclient-seamless-tty2-control.pid
documents         pp_pizza.txt         .vboxclient-seamless-tty2-service.pid
dotnet            practicels           .vboxclient-vmvga-session-tty2-control.pid
downloads         practicels.tar.xz    .vboxclient-vmvga-session-tty2-service.pid
fonts             .profile             Videos
gitconfig         Public               .vscode
gnupg             snap
lab4files         .ssh
chris@CIS106:/usr$ ls -lh ~

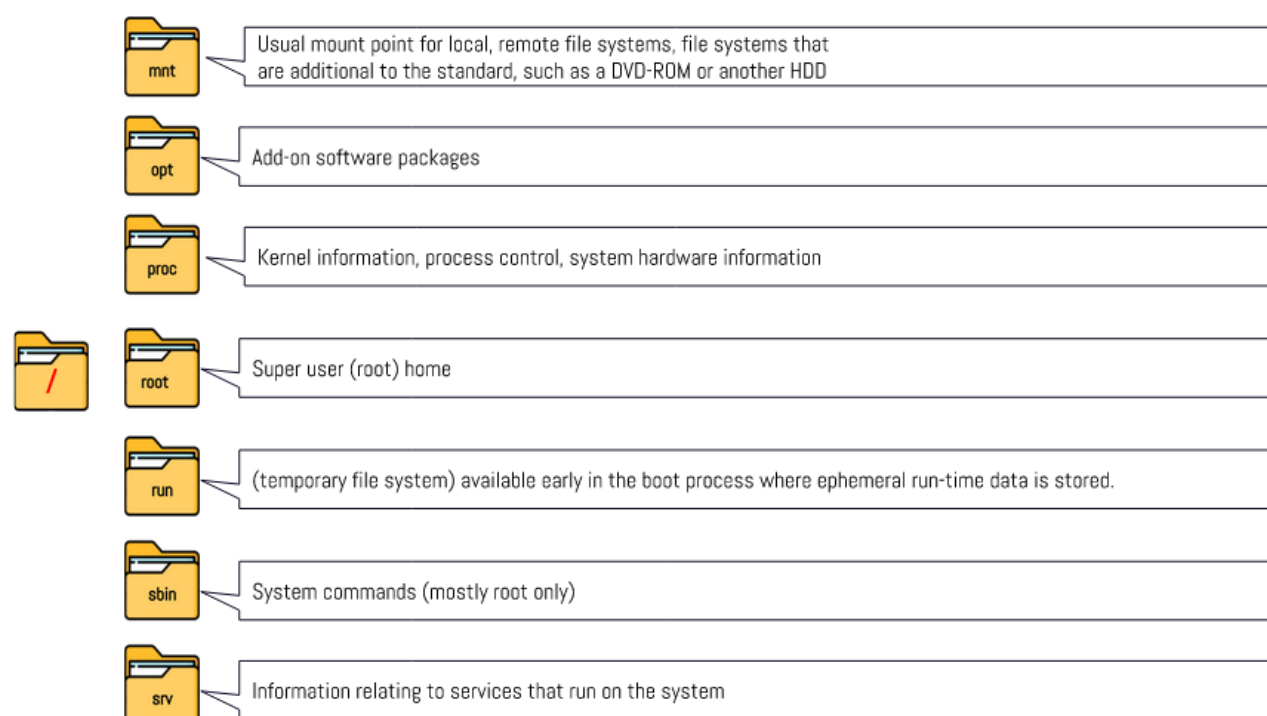
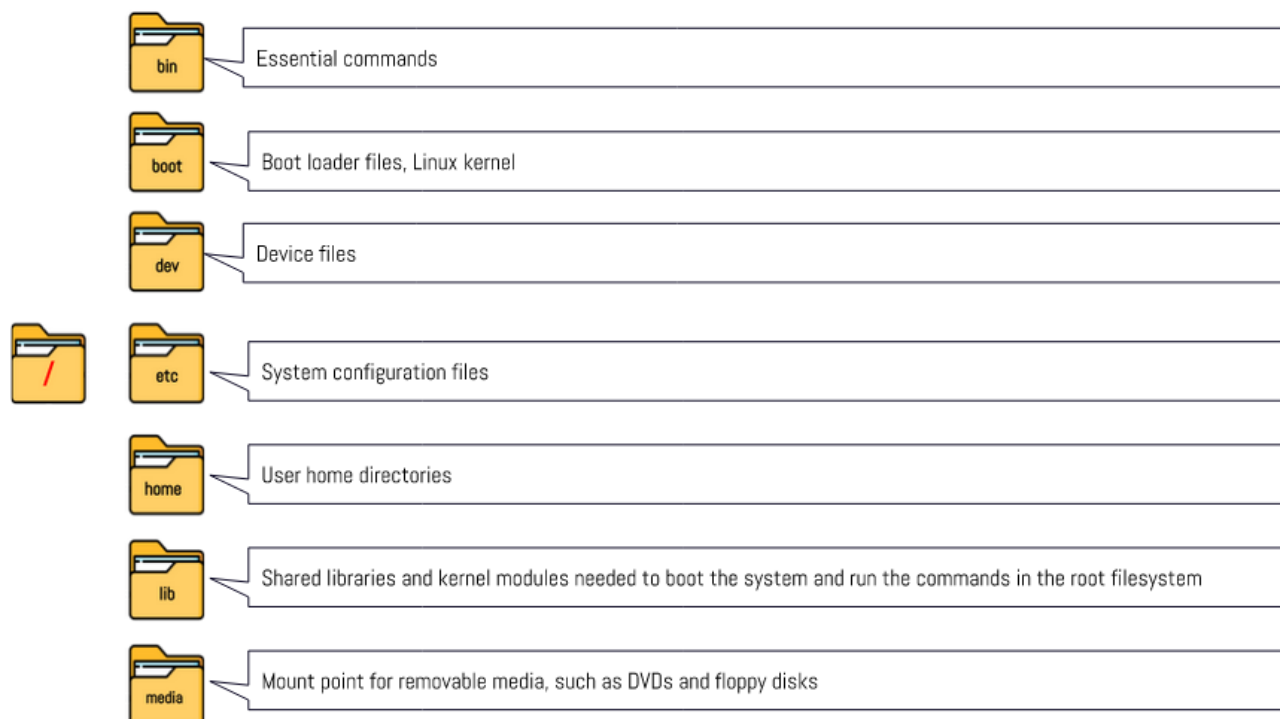
```

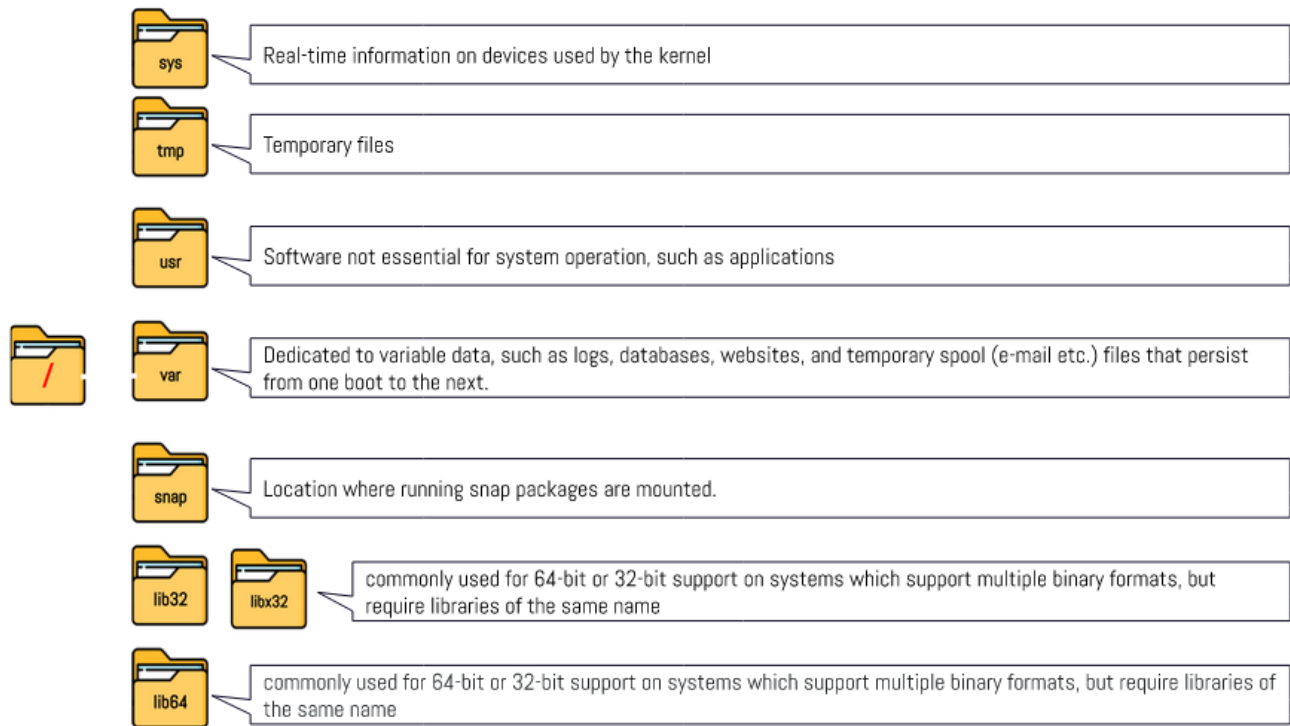
```

chris@CIS106: ~/practicels
..      history-debian.pdf  people.csv  tux-penguin.gif
book.txt homework.docx          song.mp3
chris@CIS106:~/practicels$ ls -l
total 2932
-rw-rw-r-- 1 chris chris 1043 Feb 27 2022 book.txt
-rw-rw-r-- 1 chris chris 23972 Feb 27 2022 countries.xml
-rw-rw-r-- 1 chris chris 163057 Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 chris chris 111303 Feb 22 2022 homework.docx
-rw-rw-r-- 1 chris chris 1570024 Feb 27 2022 movie.mp4
-rw-rw-r-- 1 chris chris 284042 Feb 27 2022 people.csv
-rw-rw-r-- 1 chris chris 764176 Feb 27 2022 song.mp3
-rw-rw-r-- 1 chris chris 21314 Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 chris chris 44299 Jan 31 2020 tux-penguin.gif
chris@CIS106:~/practicels$ ls -lh
total 2.9M
-rw-rw-r-- 1 chris chris 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 chris chris 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 chris chris 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 chris chris 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 chris chris 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 chris chris 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 chris chris 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 chris chris 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 chris chris 44K Jan 31 2020 tux-penguin.gif

```

THE LINUX FILE SYSTEM DIRECTORIES AND THEIR PURPOSE:





## ALL THE COMMANDS FOR NAVIGATING THE FILESYSTEM

Command	What it does	Syntax	Example
<code>pwd</code>	used for displaying the current working directory	<code>pwd</code>	<code>pwd = /home/chris</code>
<code>cd</code>	used for changing the current working directory to the home directory of the current user.	<code>cd + option + directory</code>	<code>cd /usr/share/themes</code>
<code>ls</code>	used for displaying all the files inside a given directory. when no directory is specified, "ls" displays the files in the current directories	<code>ls + option + directory</code>	<code>ls -l</code>

## Basic terminology

- File System - the way files are stored and organized
- Current directory - directory where you are at the moment
- Parent Directory - the subdirectory that is adjacent to the current working directory
- The difference between your home directory and THE HOME directory - your home directory is the file where all of the files in, "home" are stored. "The home" directory can also be referred to as the root directory, where all files from the system stem from.
- pathname - indicates the location of the file in the filesystem
- relative path - the location of a file starting from the root of the file system

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