

# Week Report 4

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## PRACTICE FROM THE PRESENTATION THE LINUX FILE SYSTEM:

### practice 1

```
1: daabualia@cis106: ~ ▾  
daabualia@cis106:~$ pwd  
/home/daabualia  
daabualia@cis106:~$ cd /home/daabualia/Downloads/  
daabualia@cis106:~/Downloads$ pwd  
/home/daabualia/Downloads  
daabualia@cis106:~/Downloads$ cd ..  
daabualia@cis106:~$ cd ../../  
daabualia@cis106:/$ pwd  
/  
daabualia@cis106:/$ cd -  
/home/daabualia  
daabualia@cis106:~$ _
```

### practice 2

```

1/1  +  ...bualia@cis106: ~/practicels  A  x
1: daabualia@cis106: ~/practicels  A  x

daabualia@cis106:~$ wget https://cis106.com/assets/practicels.tar.xz
--2023-10-27 18:16:16-- 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  --.-KB/s    in 0.08s

2023-10-27 18:16:16 (25.9 MB/s) - 'practicels.tar.xz' saved [2229212/2229212]

daabualia@cis106:~$ tar jxf practicels.tar.xz
bzip2: (stdin) is not a bzip2 file.
tar: Child returned status 2
tar: Error is not recoverable: exiting now
daabualia@cis106:~$ cd practicels/
bash: cd: practicels/: No such file or directory
daabualia@cis106:~$ tar Jxf practicels.tar.xz
daabualia@cis106:~$ cd practicels/
daabualia@cis106:~/practicels$ ls
book.txt      history-debian.pdf  movie.mp4      song.mp3      tux-penguin.gif
countries.xml  homework.docx      people.csv     tux-nobg.png
daabualia@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
daabualia@cis106:~/practicels$ ls -l
total 2932

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

```

```
-rw-rw-r-- 1 daabualia daabualia 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 daabualia daabualia 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 daabualia daabualia 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 daabualia daabualia 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 daabualia daabualia 160K Feb 27 2022 history-debian.pdf
daabualia@cis106:~/practicels$ ls -l
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
daabualia@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
daabualia@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
daabualia@cis106:~/practicels$
```

practice 3

```

daabualia@cis106:~$ pwd
/home/daabualia
daabualia@cis106:~$ cd
daabualia@cis106:~$ cd /
daabualia@cis106:/$ cd usr/share/themes
daabualia@cis106:/usr/share/themes$ cd ../../..
daabualia@cis106:/usr$ ls -A ~
2
.bash_history      myproject
.bash_logout       pictures
.bashrc            Pictures
.cache             .pki
.ccache            plants
cis106              'plants dr'
.cis106.png         practicels
.config            practicels.tar.xz
Desktop             practicles.
Documents           .profile
.dotnet             Public
Downloads           snap
file                .ssh
file1               .sudo_as_admin_successful
file2               sunflower.mp3
file3               Templates
filefolder         .thunderbird
.fonts              .vboxclient-clipboard-tty2-control.pid
Games              .vboxclient-clipboard-tty2-service.pid
gitcommands.txt    .vboxclient-draganddrop-tty2-control.pid

```

```

Desktop            practicles.
Documents          .profile
.dotnet            Public
Downloads          snap
file               .ssh
file1              .sudo_as_admin_successful
file2              sunflower.mp3
file3              Templates
filefolder         .thunderbird
.fonts             .vboxclient-clipboard-tty2-control.pid
Games              .vboxclient-clipboard-tty2-service.pid
gitcommands.txt    .vboxclient-draganddrop-tty2-control.pid
.gitconfig         .vboxclient-draganddrop-tty2-service.pid
.gnupg             .vboxclient-hostversion-tty2-control.pid
hidden             .vboxclient-seamless-tty2-control.pid
hidden_file        .vboxclient-seamless-tty2-service.pid
lab2.md            .vboxclient-vmvga-session-tty2-control.pid
lab4files          .vboxclient-vmvga-session-tty2-service.pid
.lessht            Videos
liana              .viminfo
.local             .vscode
.mozilla           websit
Music              website
daabualia@cis106:/usr$ cd; ls -tX cis106/
'cheat Sheets'  labs  weekReports
daabualia@cis106:~$ ls -rR ~/cis106
/home/daabualia/cis106:

```



```

daabualia@cis106:~$ ls -RR ~/cis106
/home/daabualia/cis106:
weekReports  labs  'cheat Sheets'

/home/daabualia/cis106/weekReports:
wr4-p2.png  wr4-p2.1.png  wr4.md  wr3.md  fs.1.2.png
wr4-p2.2.png  wr4-p1.png  wr3.pdf  fs.1.3.png  fs1.1.png

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

/home/daabualia/cis106/labs/lab4:
lab4.pdf  lab4.5.1.png  lab4.4.3.png  lab4.2.4.png  lab4.2.1.png
lab4.md  lab4.4.5.png  lab4.4.2.png  lab4.2.3.png  lab4.1.png
lab4.5.2.png  lab4.4.4.png  lab4.4.1.png  lab4.2.2.png  lab4.1.2.png

/home/daabualia/cis106/labs/lab3:
q2.1.png  'libre office writer.pdf'  'libreoffice impress.odp'  lab3.md
q1.1.png  'libre office presentaion.wmf'  lab3.pdf

/home/daabualia/cis106/labs/lab2:
question4.png  question3.png  question1.2.png  lab2.pdf
question4.1.png  question2.png  question1.1.png  lab2.md

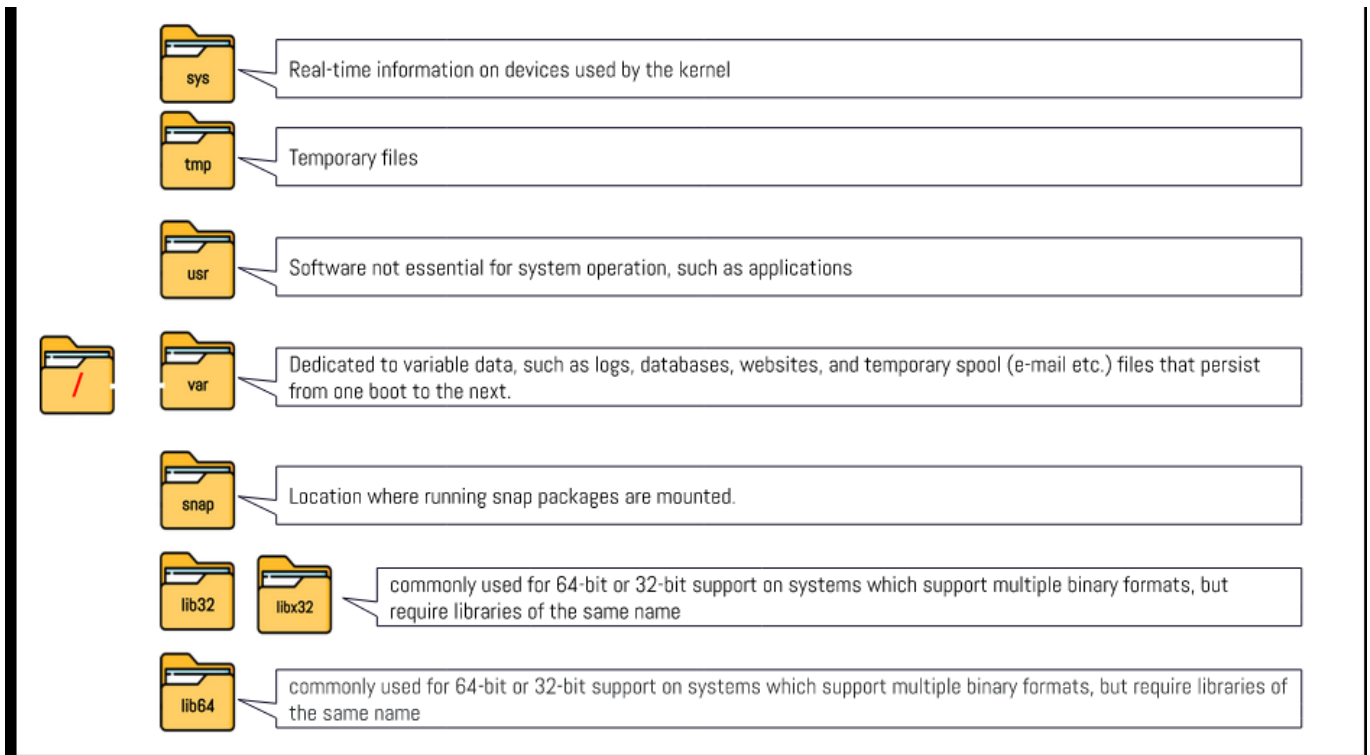
/home/daabualia/cis106/labs/lab1:
whatisubuntu.txt  what-is-ubuntu.pdf  johndoe_submission.pdf
what_is_ubuntu_submission.pdf  ubuntu-logo.png  johndoe_submission.md

Linux workshop ubuntu software installation cheat sheet.png
daabualia@cis106:~$ ls -lh ~
total 4.4M
-rw-rw-r-- 1 daabualia daabualia  0 Oct 26 18:17 2
drwxrwxr-x 6 daabualia daabualia 4.0K Oct 10 20:18 cis106
drwxr-xr-x 2 daabualia daabualia 4.0K Oct  5 11:59 Desktop
drwxr-xr-x 2 daabualia daabualia 4.0K Oct 26 18:08 Documents
drwxr-xr-x 4 daabualia daabualia 4.0K Oct 26 18:03 Downloads
-rw-rw-r-- 1 daabualia daabualia  0 Oct 26 18:17 file
-rw-rw-r-- 1 daabualia daabualia  0 Oct 26 18:45 file1
-rw-rw-r-- 1 daabualia daabualia  0 Oct 26 18:45 file2
-rw-rw-r-- 1 daabualia daabualia  0 Oct 26 18:45 file3
drwxrwxr-x 2 daabualia daabualia 4.0K Oct 26 18:19 filefolder
drwxrwxr-x 3 daabualia daabualia 4.0K Oct 19 18:22 Games
-rw-rw-r-- 1 daabualia daabualia 88 Sep 25 10:06 gitcommands.txt
drwxrwxr-x 2 daabualia daabualia 4.0K Sep 28 17:57 hidden

```

THE LINUX FILE SYSTEM DIRECTORIES AND THEIR PURPOSE:





## ALL THE COMMANDS FOR NAVIGATING THE FILESYSTEM

Command	What it does	Syntax	Example
pwd	prints current directory	pwd	'pwd'
cd	changes the current working directory	cd	'cd'
ls	list all files inside a given directory	ls	'ls'

## Basic terminology

- **File system** The way files are stored and organized.
- **Current directory** The directory where are you at the moment.
- **parent directory** You are always working inside a particular directory and you can move forward to a subdirectory or backwards to the directory.
- **the difference between YOUR HOME directory and THE HOME directory** the HOME directory is the default directory for a user when they log in. It is also known as the user's home directory and is represented by ~. The HOME directory contains the user's personal files, settings, and configurations. YOUR HOME directory is a subdirectory within the HOME directory that is created for each user. It is represented by ~/ followed by the username. This subdirectory contains files and directories that are specific to that user.
- **pathname** Every file has a pathname which indicates the location of the file in the filesystem.
- **relative path** The location of a file starting from the current working directory that is located inside the current working directory.

- **absolute path** The location of a file starting from the current working directory that is located inside the current working directory.