# Week Report 4

### Practice from the presentation The Linux File system:

Practice 1

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

Practice 2

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

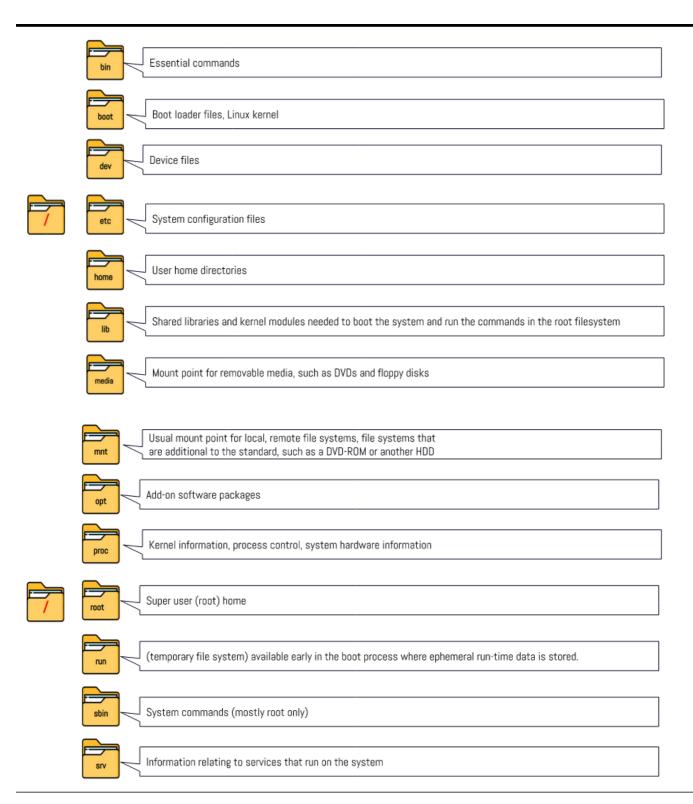
```
ajtavarez@cis106:~/Downloads/practicels$ ls -mr
tux-penguin.gif, tux-nobg.png, song.mp3, people.csv, movie.mp4, homework.docx, history-debian.pdf, countries.xml,
book.txt
ajtavarez@cis106:~/Downloads/practicels$ ls -1X
people.csv
homework.docx
tux-penguin.gif
song.mp3
movie.mp4
history-debian.pdf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

#### Practice 3

```
1: ajtavarez@cis106: ~ ~
ajtavarez@cis106:~/Downloads/practicels$ cd
ajtavarez@cis106:~$ pwd
/home/ajtavarez
ajtavarez@cis106:~$ cd ../
ajtavarez@cis106:/home$ cd /
ajtavarez@cis106:/$ cd usr/share/themes
ajtavarez@cis106:/usr/share/themes$ cd ../../
ajtavarez@cis106:/usr$ ls A~
ls: cannot access 'A~': No such file or directory
ajtavarez@cis106:/usr$ ls A ~
ls: cannot access 'A': No such file or directory
/home/ajtavarez:
                   lab4files
2
3
                   myproject
                   orange
cis 106 notes'
                   Pictures
                   'plants"EC'
Desktop
                   practicels.tar
Public
file1
file2
file3
gitcommands.txt 'What is linux new presentation - Google Slides.pdf'
ajtavarez@cis106:/usr$ cd; ls -tX Aramys07/cis106
ls: cannot access 'Aramys07/cis106': No such file or directory
ajtavarez@cis106:~$ cd; ls -tX cis106/
cheatsheets labs weekreports
ajtavarez@cis106:~$ ls -rR ~/cis106/
/home/ajtavarez/cis106/:
weekreports labs cheatsheets
/home/ajtavarez/cis106/weekreports:
wr4-p2.png wr4-p2.1.png wr4-p1.png wr4.md wr3.pdf wr3.md fs1.2.png fs1.1.png
/home/ajtavarez/cis106/labs:
 lab4 lab3 'lab 2' lab1
/home/ajtavarez/cis106/labs/lab4:
lab4.pdf
              lab4.5.1.png lab4.4.1-7.png
                                              lab4.2.3.png
                                                                 lab4.1.png
              lab4.4.9.png lab4.4.10.png
lab4.md
                                              lab4.2.2.png.png la4.1.2.png
lab4.5.2.png lab4.4.8.png lab4.4.10.1.png lab4.2.1.png
/home/ajtavarez/cis106/labs/lab3:
'Text from wikipidea.pdf'
                                                           lab3.pdf
                            q1.1.png
q2.1.png
                            'presentation for lab3.odp'
                                                           lab3.md
'/home/ajtavarez/cis106/labs/lab 2':
question4.png question2.png
                                 question1.1.png lab2.md
question3.png question1.2.png
                                 lab2.pdf
/home/ajtavarez/cis106/labs/lab1:
whatisubuntu.txt
                              what-is-ubuntu.pdf resume.pdf
                              ubuntu-logo.png
what_is_ubuntu_submission.pdf
                                                resume.md
what_is_ubuntu_submission.md
                              ubuntu-desktop.png johndoe.jpeg
what_is_ubuntu_submission.html resume.png
                                                 johndoeinfo.txt
/home/ajtavarez/cis106/cheatsheets:
'Linux Workshop Ubuntu Software installation cheat sheet.png'
ajtavarez@cis106:~$ ls -lh ~
total 3.0M
-rw-rw-r-- 1 ajtavarez ajtavarez
                                 0 Oct 26 18:17 1
-rw-rw-r-- 1 ajtavarez ajtavarez
                                 0 Oct 26 18:18
-rw-rw-r-- 1 ajtavarez ajtavarez
                                 0 Oct 26 18:18 3
drwxrwxr-x 6 ajtavarez ajtavarez 4.0K Oct 15 09:31
                                                cis106
-rw-rw-r-- 1 ajtavarez ajtavarez 111 Oct 5 18:12 'cis 106 notes'
drwxr-xr-x 2 ajtavarez ajtavarez 4.0K Oct 15 09:30
drwxr-xr-x 3 ajtavarez ajtavarez 4.0K Oct 26 18:32 Documents
drwxrwxr-x 7 ajtavarez ajtavarez 4.0K Oct 19 18:39
```

```
0 Oct 26 18:23
rw-rw-r-- 1 ajtavarez ajtavarez
                                                     file1
                                    0 Oct 26 18:23
rw-rw-r-- 1 ajtavarez ajtavarez
                                                     file2
   rw-r-- 1 ajtavarez ajtavarez
                                    0 Oct 26 18:23
                                                    file3
    rw-r-- 1 ajtavarez ajtavarez
                                                    gitcommands.txt
                                   87 Sep 30 14:46
drwxrwxr-x 2 ajtavarez ajtavarez 4.0K Feb 22
                                              2022
                                                     lab4files
drwxr-xr-x 2 ajtavarez ajtavarez 4.0K Oct 26 18:37
drwxrwxr-x 2 ajtavarez ajtavarez 4.0K Oct 19 18:50
                                                    myproject
rw-rw-r-- 1 ajtavarez ajtavarez
                                    0 Oct 26 18:11
drwxr-xr-x 3 ajtavarez ajtavarez 4.0K Oct 28 14:43
                                                    Pictures
drwxrwxr-x 2 ajtavarez ajtavarez 4.0K Oct 19 18:01
                                                    'plants"EC
-rw-rw-r-- 1 ajtavarez ajtavarez 2.9M Oct 12 18:35
                                                     practicels.tar
                                                    Public
drwxr-xr-x 2 ajtavarez ajtavarez 4.0K Sep 26 19:26
drwx----- 5 ajtavarez ajtavarez 4.0K Sep 26 20:02
rw-rw-r-- 2 ajtavarez ajtavarez
                                    0 Oct 26 18:36
drwxr-xr-x 2 ajtavarez ajtavarez 4.0K Sep 26 19:26
                                                     Templates
drwxr-xr-x 2 ajtavarez ajtavarez 4.0K Oct 19 18:46
-rw-rw-r-- 1 ajtavarez ajtavarez 6.4K Oct 14 20:45 'What is linux new presentation - Google Slides.pdf'
                                                                                 cis106/weekreports/wr4-p3.1.png
 ajtavarez@cis106:~$ ls -lgG -full - time ~
 ls: cannot access '-': No such file or directory
 ls: cannot access 'time': No such file or directory
 /home/ajtavarez:
 total 3128
 drwx---- 24
                  4096 Oct 14 20:23
                                     .cache
                  4096 Oct 14 20:23
 drwx----
                                      .config
                    0 Oct 26 18:17
 -rw-rw-r--
                  4096 Oct 14 14:12
 drwxrwxr-x
                                     .dotnet
                  4096 Oct 27 21:13
 drwxr-xr-x
                                     Music
                   220 Sep 26
                              19:19
                                     .bash_logout
                    0 Sep 26 19:37
                                      .sudo_as_admin_successful
                     5 Oct 28 10:04
                                      .vboxclient-vmsvga-session-tty2-service.pid
                  4096 Oct 29 12:10
 drwxr-xr-x
                                     Downloads
                   807 Oct 27 21:13
                                     .profile
                 20480 Oct 14 14:57
 drwxrwxr-x
                                      .fonts
                  4096 Oct 14 14:12
                  4002 Oct 29 12:42
                                      .bash_history
 -rw-rw-r--
                  6534 Oct 14 20:46
                                     'What is linux new presentation - Google Slides.pdf'
                  4096 Oct 29 12:09
                                     Templates
                    5 Sep 26 19:49
                                     .vboxclient-vmsvga-session-tty2-control.pid
 -rw-r
                  4096 Oct 28 12:32
                  4096 Oct 29 12:02
                                     cis106
 drwxrwxr-x
                    20 Oct 14 21:21
                                      .lesshst
                  4096 Oct 27 21:13
                                     Documents
 drwxr-xr-x
                    5 Sep 26 19:49
                                     .vboxclient-hostversion-tty2-control.pid
                    61 Oct 29 12:20
 -rw-rw-r--
                                      .gitconfig
 -rw-rw-r--
                     0 Oct 26 18:36
                                     sunflower.mp3
                     5 Sep 26 19:49
                                      .vboxclient-draganddrop-tty2-control.pid
                     5 Oct 28 10:04
                                      .vboxclient-draganddrop-tty2-service.pid
                  4096 Oct 27 21:44
                                     'plants"EC'
 drwxrwxr-x
                     0 Oct 26 18:30
 -rw-rw-r--
                                     file3
                  4096 Oct 27 21:48
 drwxrwxr-x
                                     lab4files
                  4096 Oct 14 14:12
                                      .local
                  4096 Oct 28 10:50
                    5 Sep 26 19:49
                                      .vboxclient-clipboard-tty2-control.pid
                  4096 Oct 27 21:13
                                     Pictures
                  4096 Oct 27 21:13
                                     Desktop
 drwxr-xr-x
                     5 Oct 28 10:04
                                      .vboxclient-clipboard-tty2-service.pid
                  4096 Oct 27 21:13
 drwxr-xr-x
                                     Videos
                     5 Sep 26 19:49
                                      .vboxclient-seamless-tty2-control.pid
 -rw-rw-r--
                     0 Oct 26 18:30
                                     file1
                  3771 Oct 29 12:12
                                      .bashrc
                     5 Oct 28 10:04
                                      .vboxclient-seamless-tty2-service.pid
                     0 Oct 26 18:18
               3000320 Oct 12 18:35
                                     practicels.tar
                  4096 Oct 14 14:12
                                      .vscode
                  4096 Oct 27 21:44
                                     Public
 drwxr-xr-x
                     0 Oct 26
                              18:11
                                     orange
                                     'cis 106 notes'
                   111 Oct 12 18:31
                  3520 Oct 29 12:02
                                     .cis106.png
                     0 Oct 26 18:18
```

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	change the shell directory	cd	cd
ls	list files of directory	ls	ls

## Basic terminology

- File system: The way files are stored and organized.
- Current directory: The directory where you are at the moment.
- parent directory: where you always working inside of it.
- the difference between YOUR HOME directory and THE HOME directory: Your home directory refers to the user's home directory. The home directory refers to the home directory located in the root.
- pathname: Indicates the location of the file in the filesystem.
- **relative path:** The location of a file starting from the current directory.
- absolute path: Th location of a file starting a the root of the file system.