

# Week Report 4

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## PRACTICE FROM THE PRESENTATION THE LINUX FILE SYSTEM

### Practice 1



```
1/1  +  [icon] [icon]  TiliX: atovar@cis106: ~  [search] [menu] [back] [forward] [close]
1: atovar@cis106: ~  [close]
atovar@cis106:~$ pwd
/home/atovar
atovar@cis106:~$ cd /home/$USER/Downloads
atovar@cis106:~/Downloads$ pwd
/home/atovar/Downloads
atovar@cis106:~/Downloads$ cd ..
atovar@cis106:~$ cd ../../
atovar@cis106:/$ pwd
/
atovar@cis106:/$ cd -
/home/atovar
atovar@cis106:~$ _
```

The screenshot shows a terminal window titled "TiliX: atovar@cis106: ~". The user performs a series of directory navigation commands: `pwd` (returns `/home/atovar`), `cd /home/$USER/Downloads` (returns `/home/atovar/Downloads`), `cd ..` (returns `~/Downloads`), `cd ../../` (returns `~`), `pwd` (returns `/`), `cd -` (returns `/home/atovar`), and finally `_` (returns `~`). A red ASCII art pyramid is visible in the background of the terminal.

### Practice 2

```

1/1  +  [icons]  Tilix: atovar@cis106: ~/practicels

1: atovar@cis106: ~/practicels  [icons]

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

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

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

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

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

```

```

1/1  +  [icons]  Tilix: atovar@cis106: ~/practicels

1: atovar@cis106: ~/practicels  [icons]

atovar@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

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

```

## Practice 3

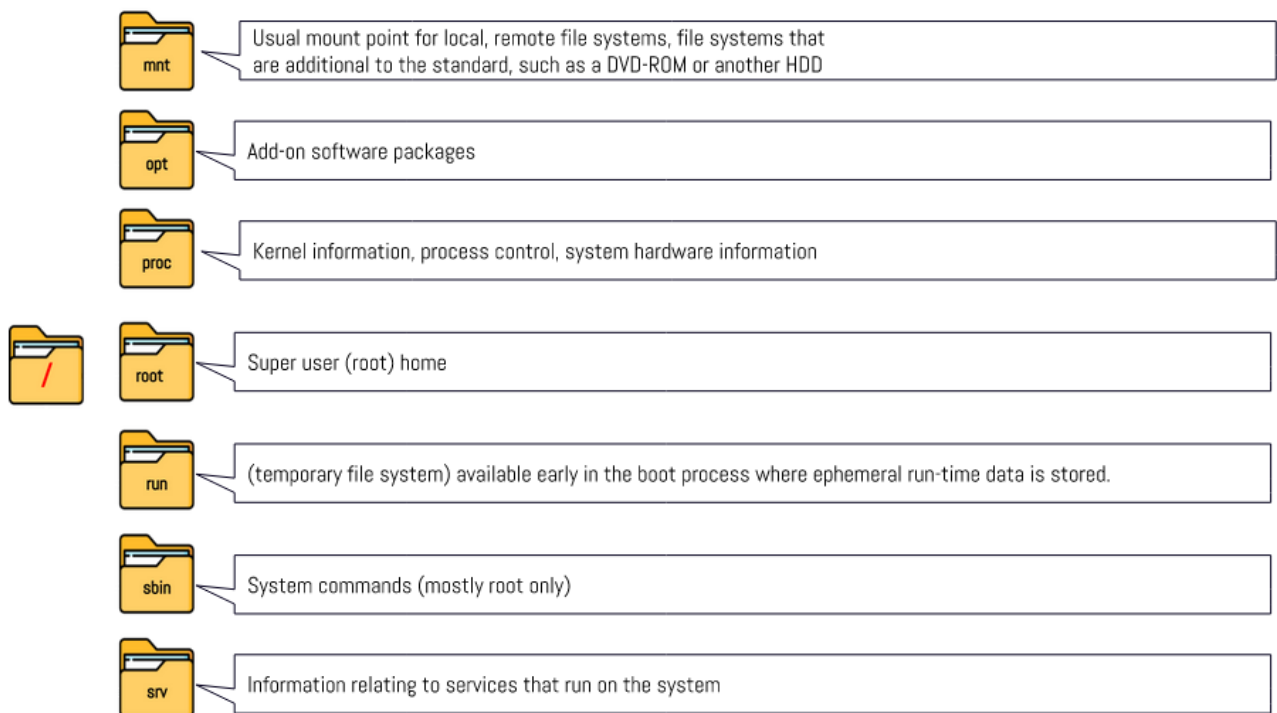
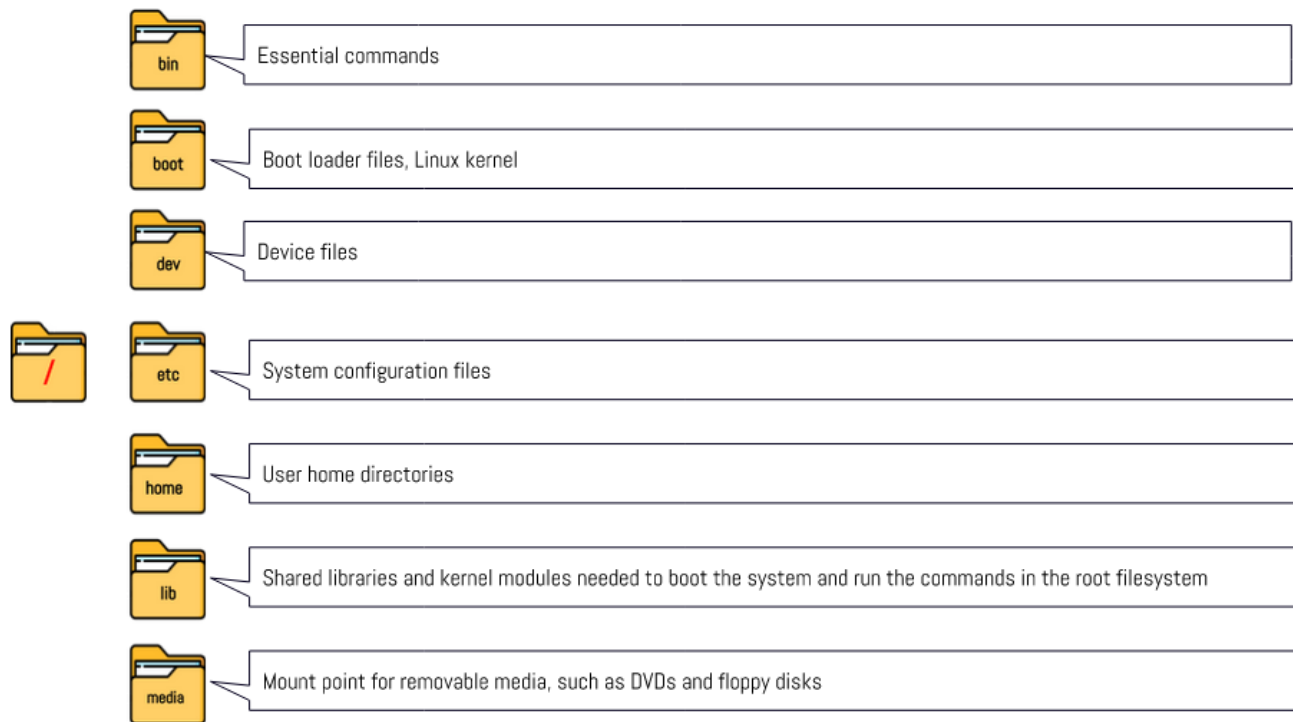
```
1/1 + [T] [C] Tilix: atovar@cis106: ~ [Q] [≡] [−] [□] [X]

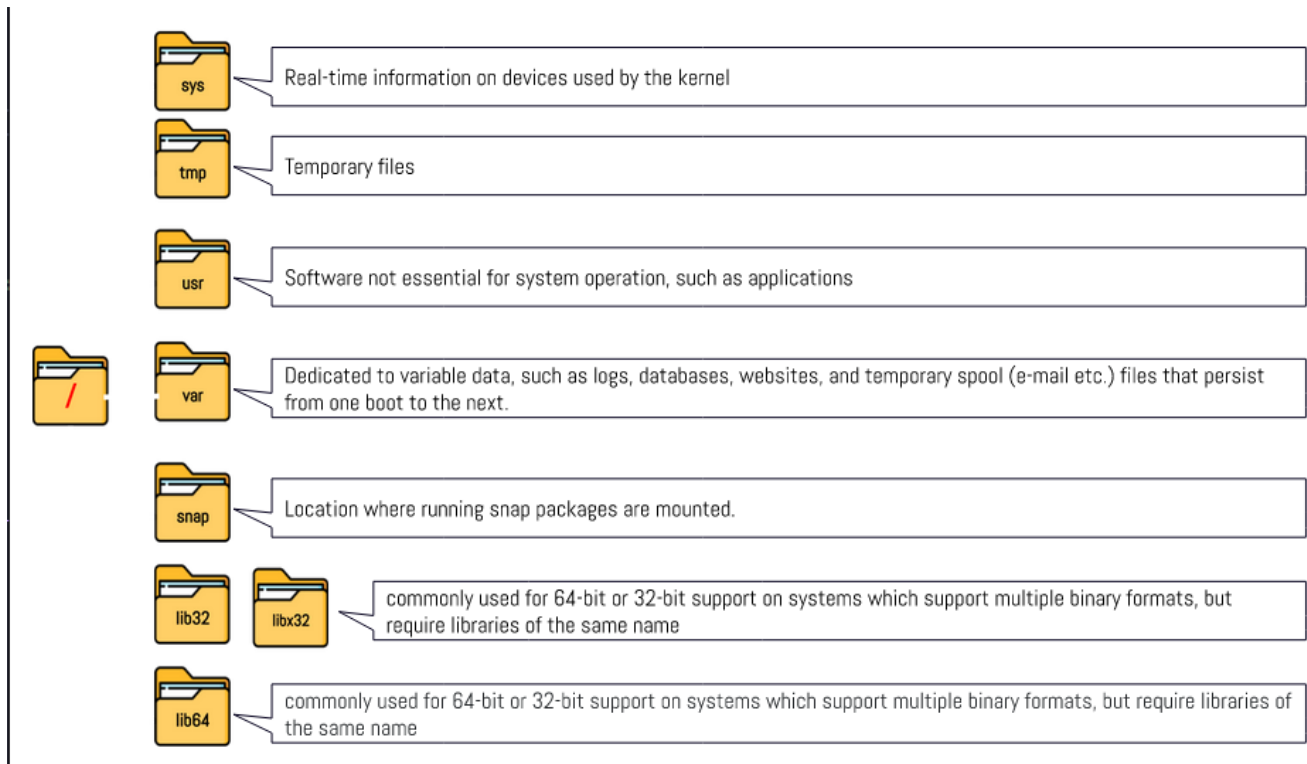
1: atovar@cis106: ~ ▾

.gitconfig      .vboxclient-hostversion-tty2-control.pid
.gnupg          .vboxclient-seamless-tty2-control.pid
jeoPizza        .vboxclient-seamless-tty2-service.pid
joePizaa        .vboxclient-vmvga-session-tty2-control.pid
.lessshst       .vboxclient-vmvga-session-tty2-service.pid
.local          Videos
Music           .viminfo
myproject       .vscode
Pictures

atovar@cis106:/usr$ cd; ls-tX your-github-repository/
ls-tX: command not found
atovar@cis106:~$ cd; ls -tX your-github-repository/
ls: cannot access 'your-github-repository/': No such file or directory
atovar@cis106:~$ cd; ls -tX your-github-repository/
ls: cannot access 'your-github-repository/': No such file or directory
atovar@cis106:~$ ls -rR ~/your-github-repository/
ls: cannot access '/home/atovar/your-github-repository/': No such file or directory
atovar@cis106:~$ ls -lh ~
total 2.2M
drwxrwxr-x 6 atovar atovar 4.0K Oct 12 01:09 cis106
drwxr-xr-x 2 atovar atovar 4.0K Oct 11 23:39 Desktop
drwxr-xr-x 2 atovar atovar 4.0K Sep 29 18:18 Documents
drwxr-xr-x 2 atovar atovar 4.0K Oct 19 21:45 Downloads
-rw-rw-r-- 1 atovar atovar  91 Sep 29 23:37 gitcommands.txt
drwxrwxr-x 3 atovar atovar 4.0K Oct 19 21:32 jeoPizza
drwxrwxr-x 3 atovar atovar 4.0K Oct 19 21:32 joePizaa
drwxr-xr-x 2 atovar atovar 4.0K Oct 19 21:51 Music
drwxrwxr-x 2 atovar atovar 4.0K Oct 19 21:51 myproject
drwxr-xr-x 2 atovar atovar 4.0K Oct 19 21:45 Pictures
drwxrwxr-x 2 atovar atovar 4.0K Feb 27 2022 practicels
-rw-rw-r-- 1 atovar atovar 2.2M Oct 14 11:22 practicels.tar.xz
drwxr-xr-x 2 atovar atovar 4.0K Sep 29 18:18 Public
drwx----- 5 atovar atovar 4.0K Sep 29 18:57 snap
drwxr-xr-x 2 atovar atovar 4.0K Sep 29 18:18 Templates
drwxr-xr-x 2 atovar atovar 4.0K Oct 19 21:45 Videos
atovar@cis106:~$ ls -lgG -full-time ~
ls: invalid option -- '-'
Try 'ls --help' for more information.
atovar@cis106:~$ ls -lgG -full-time ~
ls: invalid option -- '-'
Try 'ls --help' for more information.
atovar@cis106:~$ _
```

## 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	displaying all the files inside a given 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:** Moving backwards to the previous directory.
- **the difference between YOUR HOME directory and THE HOME directory:** When you open your terminal emulator, your current working directory is your home directory. When you open the file manager, your current working directory is the home directory.
- **pathname:** Which 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.
- **absolute path:** The location of a file starting at the root of the file system.