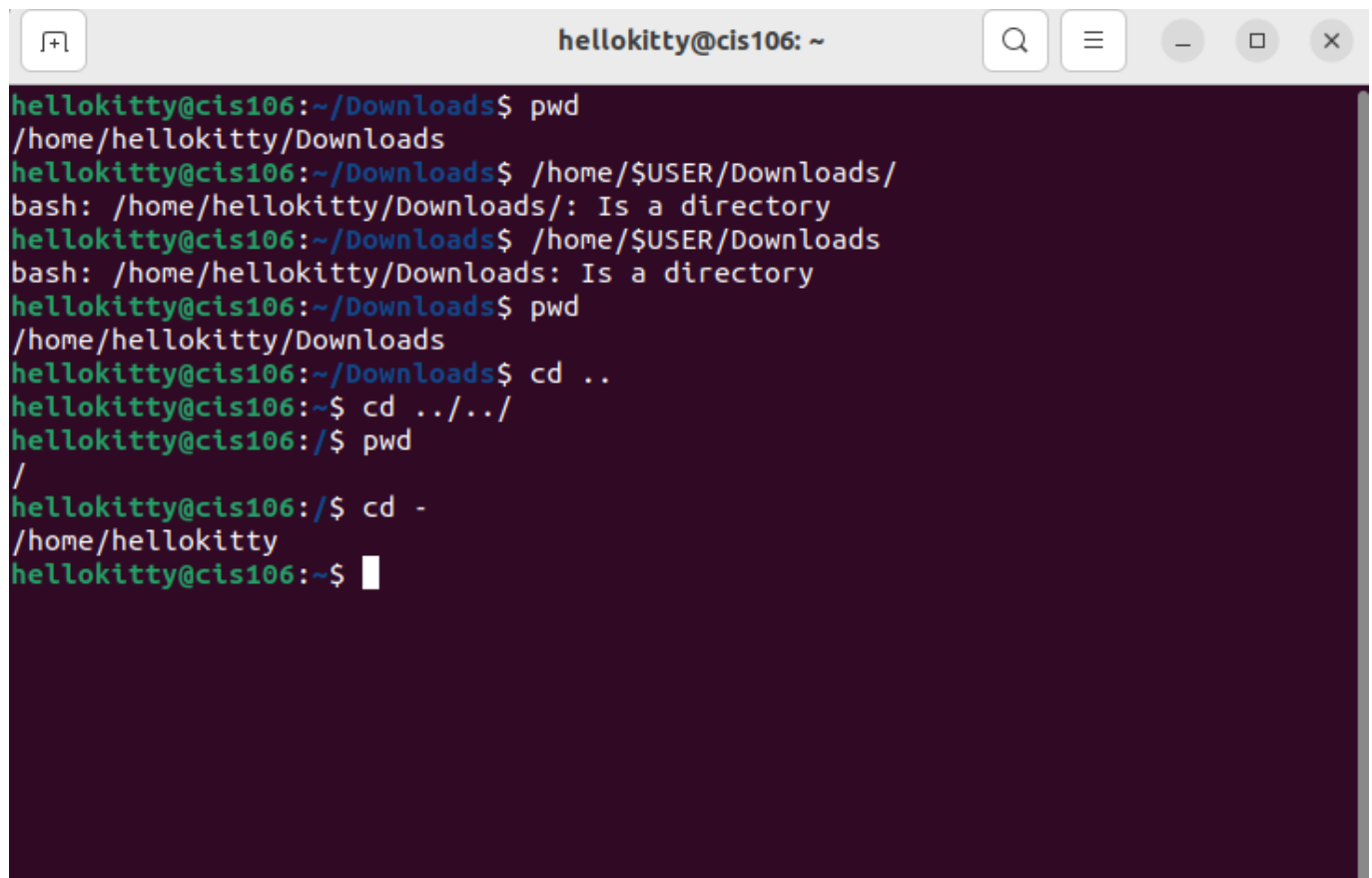


# Week Report 4

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Practice from the presentation The Linux File system:

## Practice 1

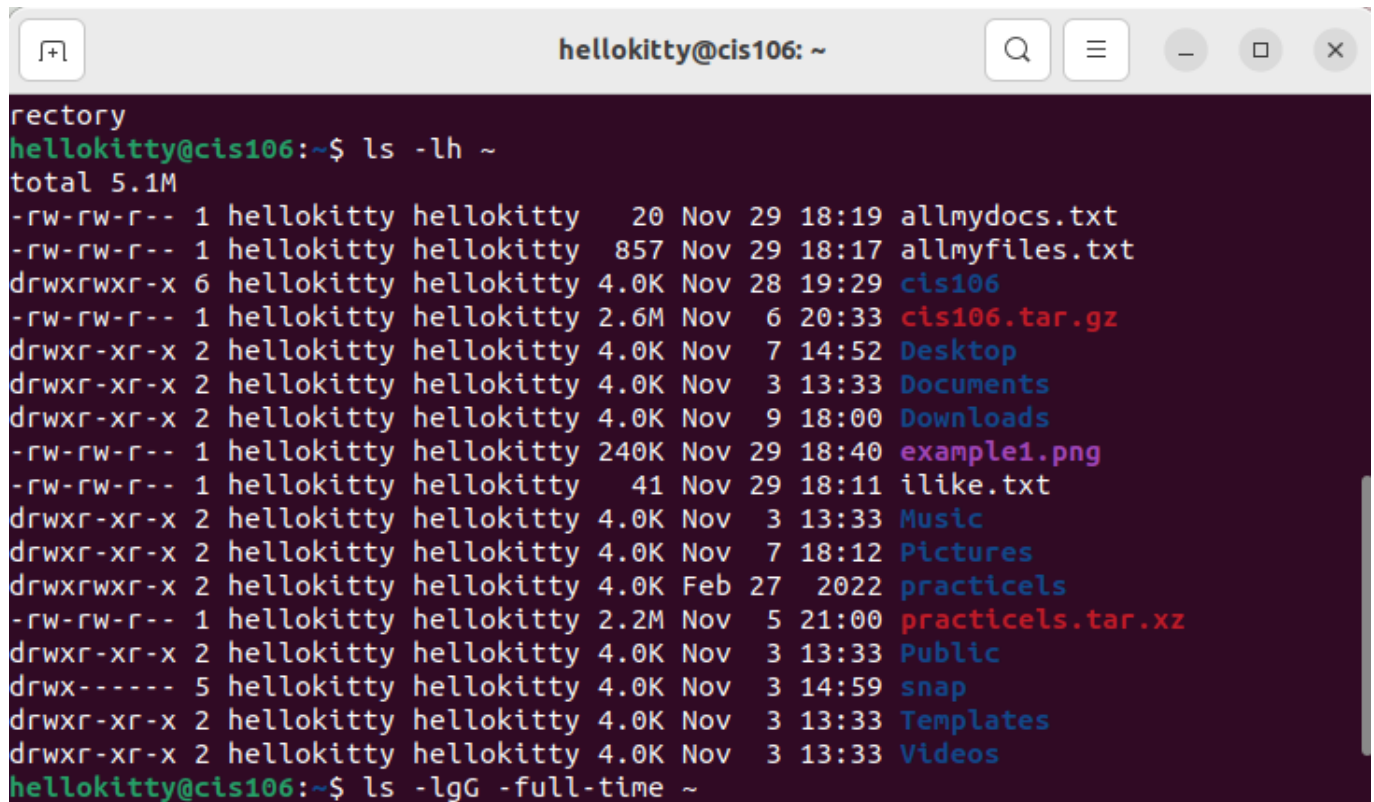


```
hellokitty@cis106: ~  
hellokitty@cis106:~/Downloads$ pwd  
/home/hellokitty/Downloads  
hellokitty@cis106:~/Downloads$ /home/$USER/Downloads/  
bash: /home/hellokitty/Downloads/: Is a directory  
hellokitty@cis106:~/Downloads$ /home/$USER/Downloads  
bash: /home/hellokitty/Downloads: Is a directory  
hellokitty@cis106:~/Downloads$ pwd  
/home/hellokitty/Downloads  
hellokitty@cis106:~/Downloads$ cd ..  
hellokitty@cis106:~$ cd ../../  
hellokitty@cis106:/$ pwd  
/  
hellokitty@cis106:/$ cd -  
/home/hellokitty  
hellokitty@cis106:~$
```

## Practice 2

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

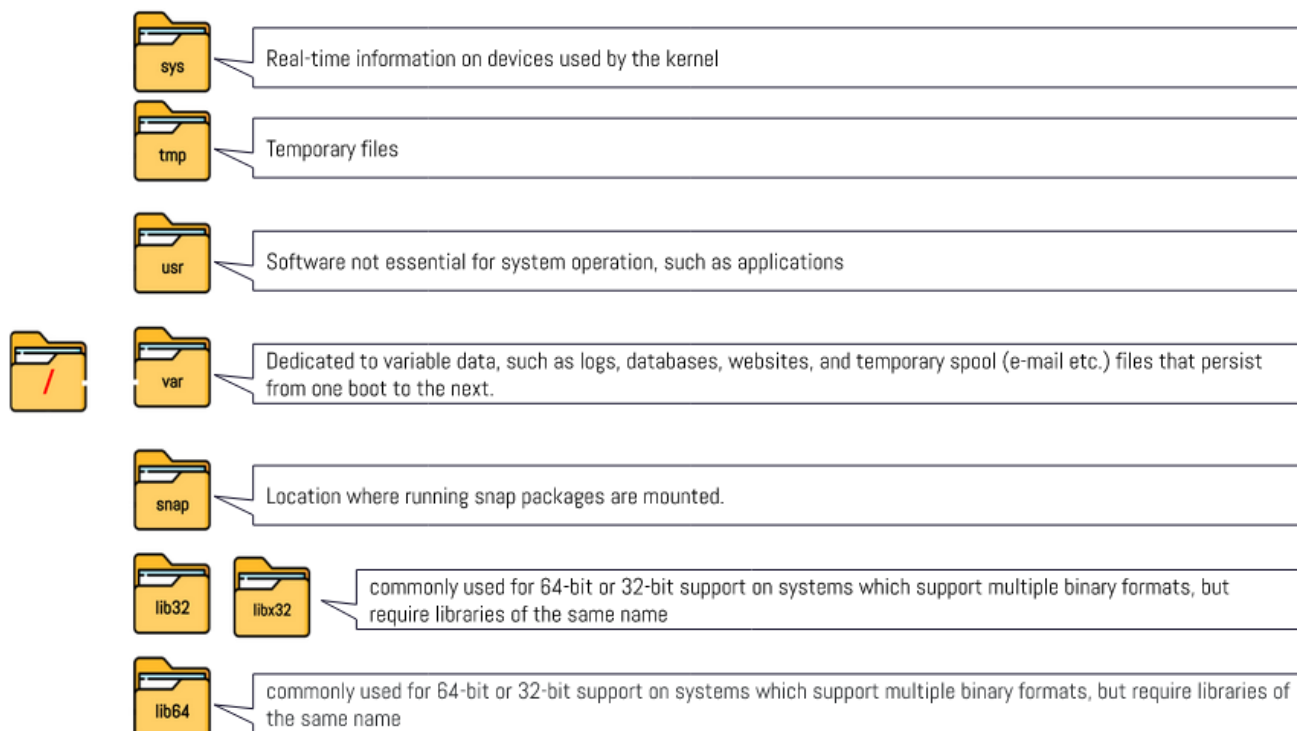
### Practice 3

A terminal window titled 'hellokitty@cis106: ~' with standard window controls. It displays the output of the 'ls -lh ~' command, showing a list of files and directories in the user's home directory. The output includes file permissions, owner, group, size, date, and filename. Files listed include 'allmydocs.txt', 'allmyfiles.txt', 'cis106', 'cis106.tar.gz', 'example1.png', and 'ilike.txt'. Directories listed include 'Desktop', 'Documents', 'Downloads', 'Music', 'Pictures', 'Public', 'snap', 'Templates', and 'Videos'.

```
rectory
hellokitty@cis106:~$ ls -lh ~
total 5.1M
-rw-rw-r-- 1 hellokitty hellokitty  20 Nov 29 18:19 allmydocs.txt
-rw-rw-r-- 1 hellokitty hellokitty 857 Nov 29 18:17 allmyfiles.txt
drwxrwxr-x 6 hellokitty hellokitty 4.0K Nov 28 19:29 cis106
-rw-rw-r-- 1 hellokitty hellokitty 2.6M Nov  6 20:33 cis106.tar.gz
drwxr-xr-x 2 hellokitty hellokitty 4.0K Nov  7 14:52 Desktop
drwxr-xr-x 2 hellokitty hellokitty 4.0K Nov  3 13:33 Documents
drwxr-xr-x 2 hellokitty hellokitty 4.0K Nov  9 18:00 Downloads
-rw-rw-r-- 1 hellokitty hellokitty 240K Nov 29 18:40 example1.png
-rw-rw-r-- 1 hellokitty hellokitty  41 Nov 29 18:11 ilike.txt
drwxr-xr-x 2 hellokitty hellokitty 4.0K Nov  3 13:33 Music
drwxr-xr-x 2 hellokitty hellokitty 4.0K Nov  7 18:12 Pictures
drwxrwxr-x 2 hellokitty hellokitty 4.0K Feb 27 2022 practicels
-rw-rw-r-- 1 hellokitty hellokitty 2.2M Nov  5 21:00 practicels.tar.xz
drwxr-xr-x 2 hellokitty hellokitty 4.0K Nov  3 13:33 Public
drwx----- 5 hellokitty hellokitty 4.0K Nov  3 14:59 snap
drwxr-xr-x 2 hellokitty hellokitty 4.0K Nov  3 13:33 Templates
drwxr-xr-x 2 hellokitty hellokitty 4.0K Nov  3 13:33 Videos
hellokitty@cis106:~$ ls -lgG -full-time ~
```

The Linux File system directories and their purpose:





## All the commands for navigating the filesystem

Command	What it does	Syntax	Example
pwd	used for displaying the current working directory	<code>pwd</code>	<code>pwd</code>
cd	used for changing the current working directory	<code>cd + destination</code>	<code>cd downloads</code>
ls	used for displaying all the files inside a given directory	<code>ls' + 'option + directory to list</code>	<code>ls -a</code>

## Basic terminology

- **File system**
- The way files are stored and organized.
- **Current directory**
- The directory where you are 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 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 file manager, your current working directory is the home directory.

- **pathname**
  - In a filesystem, every file has a pathname which indicates the location of the file in the filesystem (like an address)
- **absolute path**
  - the location of a file starting at the root of the file system.
- **relative path**
  - the location of a file starting from the current working directory or a directory that is located inside the current working directory.