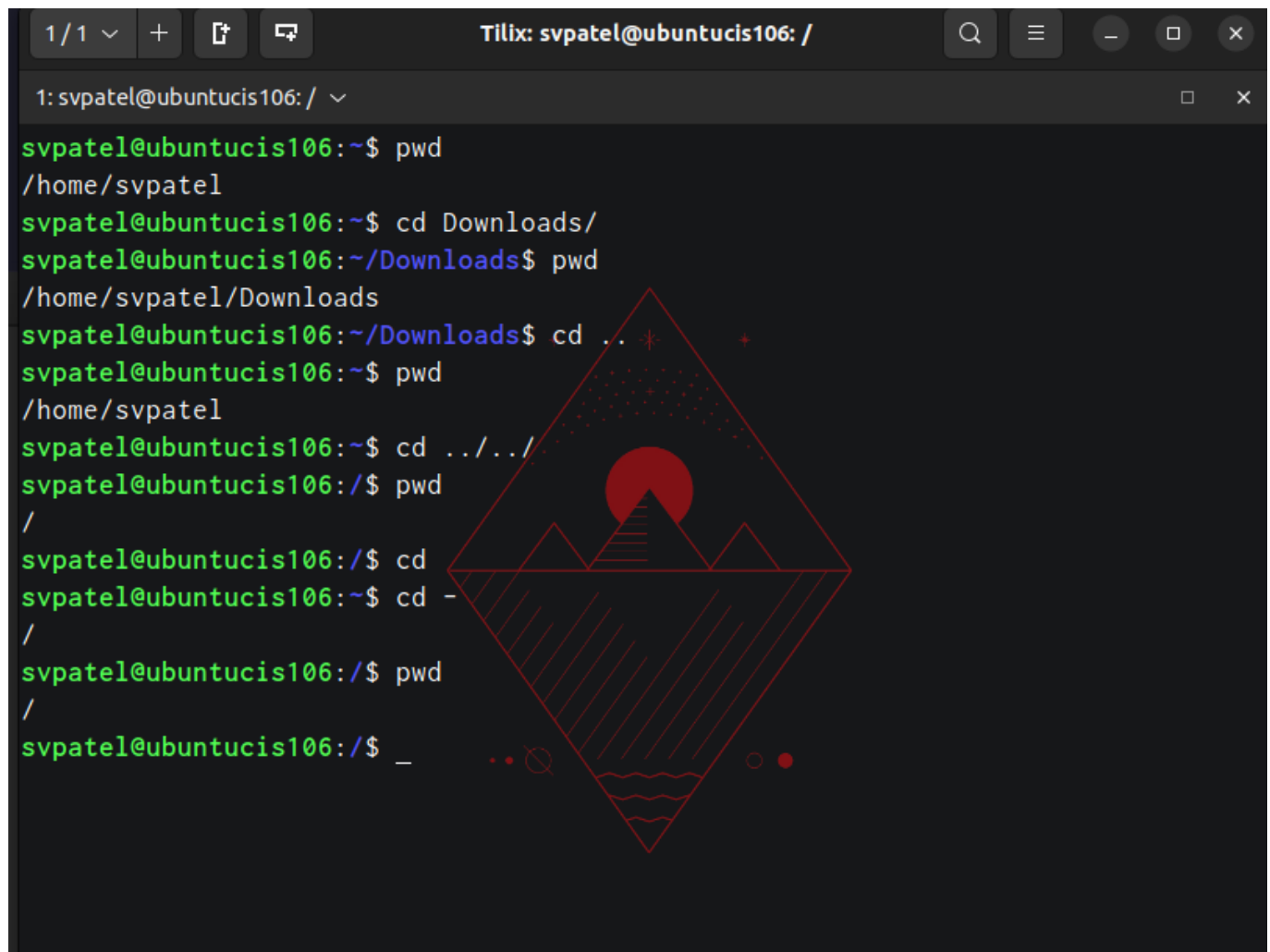


```
name: sahil v patel  
course: cis 106  
semester: spring 23
```

Week Report 4

Practice from the presentation The Linux File System:

Practice 1



```
1/1 v + [ ] [ ] Tilix: svpatel@ubuntucis106: /  
1: svpatel@ubuntucis106: / v  
svpatel@ubuntucis106:~$ pwd  
/home/svpatel  
svpatel@ubuntucis106:~$ cd Downloads/  
svpatel@ubuntucis106:~/Downloads$ pwd  
/home/svpatel/Downloads  
svpatel@ubuntucis106:~/Downloads$ cd ..  
svpatel@ubuntucis106:~$ pwd  
/home/svpatel  
svpatel@ubuntucis106:~$ cd ../../  
svpatel@ubuntucis106:/$ pwd  
/  
svpatel@ubuntucis106:/$ cd -  
/  
svpatel@ubuntucis106:/$ pwd  
/  
svpatel@ubuntucis106:/$ _
```

The terminal window shows a series of file system navigation commands. A large red geometric drawing, resembling a stylized mountain or a complex shape, is overlaid on the terminal output. The drawing consists of a large triangle with a smaller triangle inside it, and various lines and dots forming a landscape-like structure.

Practice 2

```

svpatel@ubuntu106:~$ wget http://cis106.com/assets/practicels.tar.xz
--2023-10-16 22:34:33-- http://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|:80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://cis106.com/assets/practicels.tar.xz [following]
--2023-10-16 22:34:33-- https://cis106.com/assets/practicels.tar.xz
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  7.15MB/s   in 0.3s

2023-10-16 22:34:33 (7.15 MB/s) - 'practicels.tar.xz' saved [2229212/2229212]

svpatel@ubuntu106:~$ tar Jxf practicels.tar.xz
svpatel@ubuntu106:~$ cd practicels/
svpatel@ubuntu106:~/practicels$ ls
book.txt      history-debian.pdf  movie.mp4      song.mp3      tux-penguin.gif
countries.xml homework.docx       people.csv     tux-nobg.png
svpatel@ubuntu106:~/practicels$ ls -a
.              countries.xml      movie.mp4      tux-nobg.png
..             history-debian.pdf people.csv     tux-penguin.gif
book.txt       homework.docx      song.mp3
svpatel@ubuntu106:~/practicels$ ls -l
total 2932
-rw-rw-r-- 1 svpatel svpatel 1043 Feb 27 2022 book.txt
-rw-rw-r-- 1 svpatel svpatel 23972 Feb 27 2022 countries.xml
-rw-rw-r-- 1 svpatel svpatel 163057 Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 svpatel svpatel 111303 Feb 22 2022 homework.docx
-rw-rw-r-- 1 svpatel svpatel 1570024 Feb 27 2022 movie.mp4
-rw-rw-r-- 1 svpatel svpatel 284042 Feb 27 2022 people.csv
-rw-rw-r-- 1 svpatel svpatel 764176 Feb 27 2022 song.mp3
-rw-rw-r-- 1 svpatel svpatel 21314 Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 svpatel svpatel 44299 Jan 31 2020 tux-penguin.gif
svpatel@ubuntu106:~/practicels$ ls -lh
total 2.9M
-rw-rw-r-- 1 svpatel svpatel 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 svpatel svpatel 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 svpatel svpatel 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 svpatel svpatel 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 svpatel svpatel 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 svpatel svpatel 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 svpatel svpatel 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 svpatel svpatel 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 svpatel svpatel 44K Jan 31 2020 tux-penguin.gif

svpatel@ubuntu106:~/practicels$ ls -lh
total 2.9M
-rw-rw-r-- 1 svpatel svpatel 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 svpatel svpatel 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 svpatel svpatel 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 svpatel svpatel 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 svpatel svpatel 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 svpatel svpatel 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 svpatel svpatel 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 svpatel svpatel 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 svpatel svpatel 44K Jan 31 2020 tux-penguin.gif
svpatel@ubuntu106:~/practicels$ ls -lht
total 2.9M
-rw-rw-r-- 1 svpatel svpatel 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 svpatel svpatel 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 svpatel svpatel 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 svpatel svpatel 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 svpatel svpatel 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 svpatel svpatel 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 svpatel svpatel 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 svpatel svpatel 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 svpatel svpatel 44K Jan 31 2020 tux-penguin.gif
svpatel@ubuntu106:~/practicels$ ls -lhGs
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
svpatel@ubuntu106:~/practicels$ ls -mr
tux-penguin.gif, tux-nobg.png, song.mp3, people.csv, movie.mp4, homework.docx,
history-debian.pdf, countries.xml, book.txt
svpatel@ubuntu106:~/practicels$ ls -lX
people.csv
homework.docx
tux-penguin.gif
song.mp3
movie.mp4
history-debian.pdf
tux-nobg.png
book.txt
countries.xml
svpatel@ubuntu106:~/practicels$

```

Practice 3

```

svpatel@ubuntucis106:~$ pwd
/home/svpatel
svpatel@ubuntucis106:~$ cd
svpatel@ubuntucis106:~$ cd /
svpatel@ubuntucis106:/ $ cd usr/share/themes
svpatel@ubuntucis106:/usr/share/themes$ cd ../../
svpatel@ubuntucis106:/usr$ ls -A ~
.bash_history      .gnupg      .sudo_as_admin_successful
.bash_logout       lab4files   Templates
.bashrc            .local      .thunderbird
.cache             .logo100x100.png
cis106             .mozilla    .vboxclient-clipboard-tty2-control.pid
.cis106.png        Music       .vboxclient-clipboard-tty2-service.pid
.cis106.png.png    Pictures    .vboxclient-draganddrop-tty2-control.pid
.config            .pki        .vboxclient-draganddrop-tty2-service.pid
Desktop            practicels  .vboxclient-hostversion-tty2-control.pid
Documents          practicels.tar.xz
.dotnet            .profile    .vboxclient-seamless-tty2-control.pid
Downloads          Public       .vboxclient-seamless-tty2-service.pid
.fonts             snap        .vboxclient-vmtoolsd-session-tty2-control.pid
.gitconfig         .ssh        .vboxclient-vmtoolsd-session-tty2-service.pid
                   .vscode
svpatel@ubuntucis106:/usr$ cd; ls -lX cis106
-rw-r--r-- lab3 'lab 4' labs 'week reports'
svpatel@ubuntucis106:~$ ls -lR ~/cis106
/home/svpatel/cis106:
'week reports'  labs  'lab 4'  lab3  cheatsheet

/home/svpatel/cis106/week reports:
WR4  WR3

/home/svpatel/cis106/week reports/WR4:
WEEKREPORT.md  PRACTICE2.1.png  1.4.png  1.2.png
PRACTICE2.2.png  practice1.png  1.3.png  1.1.png

/home/svpatel/cis106/week reports/WR3:
wr3.pdf  wr3.md  wr3.jpeg

/home/svpatel/cis106/labs:
whatisubuntu.txt      john_doe_submission_final.html
what_is_ubuntu_submission.pdf  johndoe.jpeg
what_is_ubuntu_submission.md  johndoeinfo.txt
what_is_ubuntu_submission.html  final_editted_ubuntu_sub.pdf
what_is_ubuntu.pdf             final_editted_ubuntu_sub.md
ubuntu-Logo.png               final_editted_ubuntu_sub.html
ubuntu-desktop.png            final_editted_John_Sub.pdf
resume.png                    final_editted_John_Sub.md
john_doe_submission_final.pdf  final_editted_John_Sub.html

john_doe_submission_final.md  'exported pdf.pdf'

/home/svpatel/cis106/lab 4:
'Question 5'  'question 4'  'question 2'  'questio 1'

/home/svpatel/cis106/lab 4/Question 5:
q5.2.png  q5.1.png

/home/svpatel/cis106/lab 4/question 4:
q9.png  q8.1.png  q6.png  q4.4.png  q4.2.png  q10.3.png  q10.1.png
q8.2.png  q7.png  q5.png  q4.3.png  q4.1.png  q10.2.png

/home/svpatel/cis106/lab 4/question 2:
q2.png  q2.3.png  q2.1.png

/home/svpatel/cis106/lab 4/questio 1:
q1.2.png  2023-10-11_18-00.png

/home/svpatel/cis106/lab3:
'Lab 3'

/home/svpatel/cis106/lab3/lab 3:
'Untitled Document 1'  lab3.jpeg  2023-10-08_01-00.png
PRESENTATION.odp      lab3.html  2023-10-08_01-00_1.png
pdf1.pdf              export.pdf  2023-10-08_00-59.png
lab3.png              2.1.png   2023-10-08_00-58.png
lab3.pdf              2023-10-08_01-15.png  1.1.png
lab3.md               2023-10-08_01-01.png

/home/svpatel/cis106/cheatsheet:
'Linux Workshop Ubuntu Software installation cheat sheet.png'
svpatel@ubuntucis106:~$ ls -lh ~
total 2.2M
drwxrwxr-x 8 svpatel svpatel 4.0K Oct 11 18:52 cis106
drwxr-xr-x 2 svpatel svpatel 4.0K Oct 4 14:35 Desktop
drwxr-xr-x 5 svpatel svpatel 4.0K Oct 11 18:01 Documents
drwxr-xr-x 2 svpatel svpatel 4.0K Oct 11 18:28 Downloads
drwxrwxr-x 2 svpatel svpatel 4.0K Feb 22 2022 lab4files
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 15:04 Music
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 16:59 Pictures
drwxrwxr-x 2 svpatel svpatel 4.0K Feb 27 2022 practicels
-rw-rw-r-- 1 svpatel svpatel 2.2M Oct 14 11:22 practicels.tar.xz
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 15:04 Public
drwx----- 6 svpatel svpatel 4.0K Oct 8 01:15 snap
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 15:04 Templates
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 15:04 Videos
svpatel@ubuntucis106:~$ ls -lgG -full-time ~

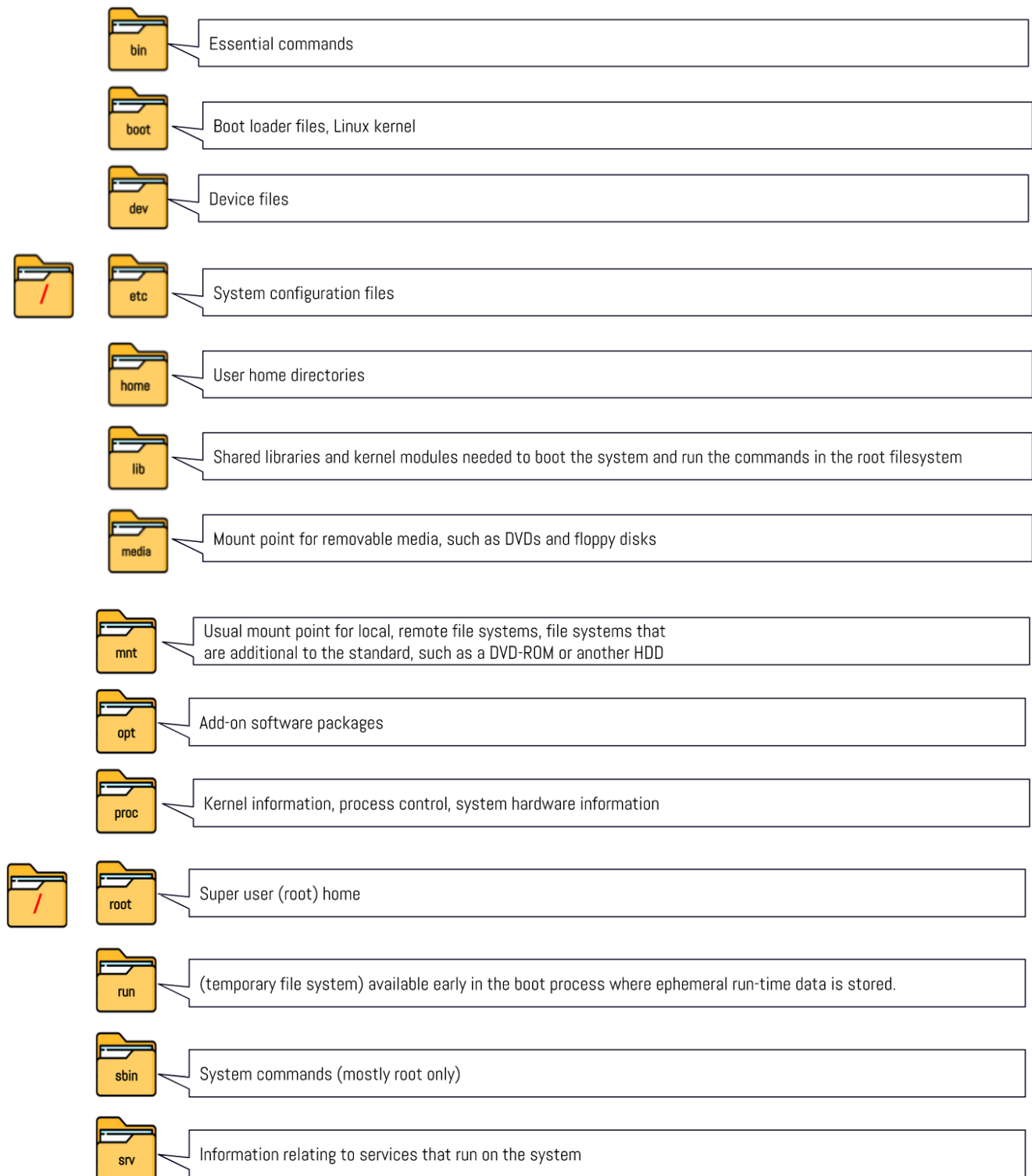
```

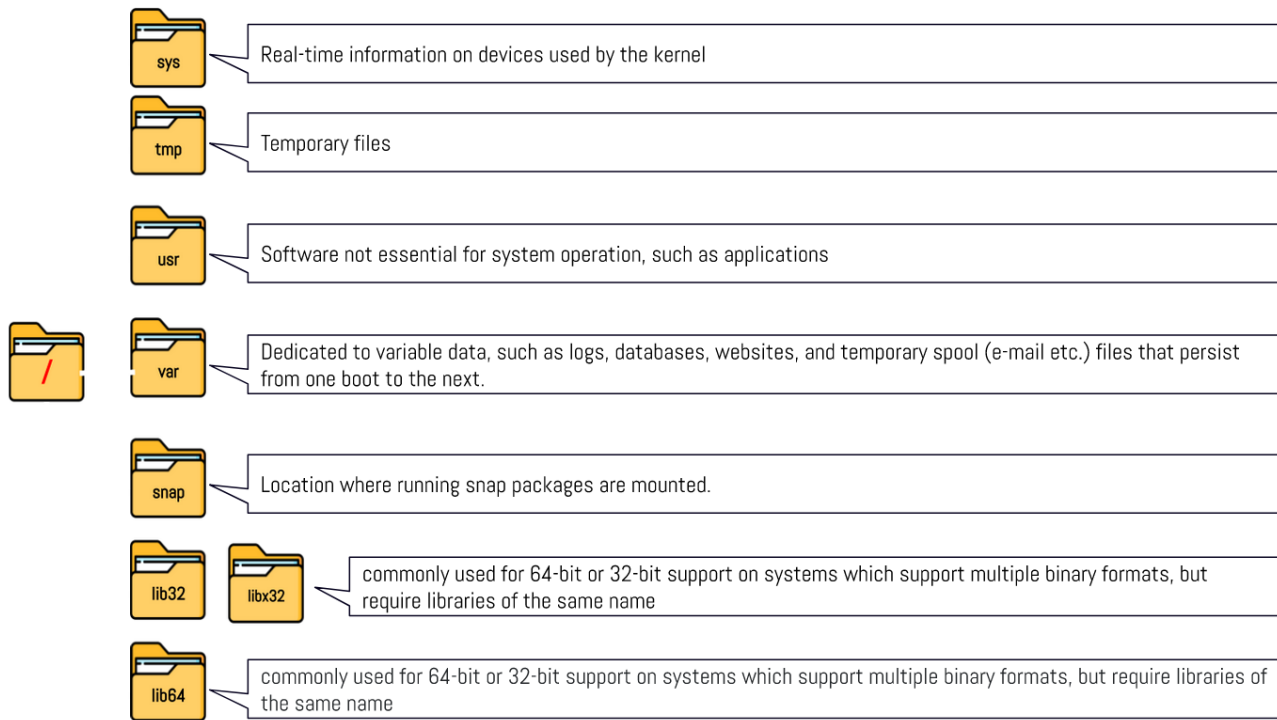
```

/home/svpatel/cis106/cheatsheet:
'Linux Workshop Ubuntu Software installation cheat sheet.png'
svpatel@ubuntu106:~$ ls -lh ~
total 2.2M
drwxrwxr-x 8 svpatel svpatel 4.0K Oct 11 18:52 cis106
drwxr-xr-x 2 svpatel svpatel 4.0K Oct  4 14:35 Desktop
drwxr-xr-x 5 svpatel svpatel 4.0K Oct 11 18:01 Documents
drwxr-xr-x 2 svpatel svpatel 4.0K Oct 11 18:28 Downloads
drwxrwxr-x 2 svpatel svpatel 4.0K Feb 22 2022 lab4files
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 15:04 Music
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 16:59 Pictures
drwxrwxr-x 2 svpatel svpatel 4.0K Feb 27 2022 practicels
-rw-rw-r-- 1 svpatel svpatel 2.2M Oct 14 11:22 practicels.tar.xz
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 15:04 Public
drwx----- 6 svpatel svpatel 4.0K Oct  8 01:15 snap
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 15:04 Templates
drwxr-xr-x 2 svpatel svpatel 4.0K Sep 27 15:04 Videos
svpatel@ubuntu106:~$ ls -lgG -full-time ~
ls: invalid option -- '-'
Try 'ls --help' for more information.
svpatel@ubuntu106:~$ ls -lgG -full-time ~
ls: invalid option -- '-'
Try 'ls --help' for more information.
svpatel@ubuntu106:~$ --help
--help: command not found
svpatel@ubuntu106:~$ ls -lgG --full-time ~
total 2228
drwxrwxr-x 8      4096 2023-10-11 18:52:04.856520902 -0400 cis106
drwxr-xr-x 2      4096 2023-10-04 14:35:40.441119559 -0400 Desktop
drwxr-xr-x 5      4096 2023-10-11 18:01:26.233964899 -0400 Documents
drwxr-xr-x 2      4096 2023-10-11 18:28:36.644763295 -0400 Downloads
drwxrwxr-x 2      4096 2022-02-22 14:18:06.000000000 -0500 lab4files
drwxr-xr-x 2      4096 2023-09-27 15:04:32.924000000 -0400 Music
drwxr-xr-x 2      4096 2023-09-27 16:59:58.057732978 -0400 Pictures
drwxrwxr-x 2      4096 2022-02-27 13:46:18.000000000 -0500 practicels
-rw-rw-r-- 1 2229212 2023-10-14 11:22:44.000000000 -0400 practicels.tar.xz
drwxr-xr-x 2      4096 2023-09-27 15:04:32.924000000 -0400 Public
drwx----- 6      4096 2023-10-08 01:15:22.804131882 -0400 snap
drwxr-xr-x 2      4096 2023-09-27 15:04:32.924000000 -0400 Templates
drwxr-xr-x 2      4096 2023-09-27 15:04:32.924000000 -0400 Videos
svpatel@ubuntu106:~$

```

The Linux from the presentation The Linux File System:





All the commands for navigating the filesystem

Command	What it does	Syntax	Example
<code>pwd</code>	prints current directory	<code>pwd</code>	<code>pwd</code>
<code>cd</code>	return to home directory	<code>cd</code>	<code>cd</code>
<code>ls</code>	To display the files and directories in your current working directory	<code>ls</code>	<code>ls</code>

Basic terminology

- **File System:** A file system is a method and data structure used by an operating system to manage and organize files on a storage device, such as a hard drive or SSD. It provides a hierarchical structure for storing, retrieving, and managing data.
- **Current Directory:** The current directory, often denoted by a single dot (.) in Linux, represents the directory in which you are currently working. Any file or directory operations you perform are relative to the current directory unless you specify an absolute path.
- **Parent Directory:** The parent directory, represented by two dots (..) in Linux, refers to the directory one level up in the directory hierarchy. It is the directory that contains the current directory.
- **Home Directory:** The home directory, often referred to as "~" (tilde), is the default directory for a specific user in Linux. Each user has their own home directory, and it is the directory in which the user starts when they log in. It is also where user-specific configuration files and personal data are typically stored.
- **The Difference Between Your Home Directory and the Home Directory:** Your home directory is a specific user's personal directory where they have their own files and settings. The "home directory" typically refers to the base directory containing all user home directories on a system. Each user's home directory is a subdirectory within the "home directory."

- **Pathname:** A pathname is a string that describes the location of a file or directory within a file system. It can be either an absolute path or a relative path and is used to navigate and locate files and directories in the file system.
- **Relative Path:** A relative path specifies the location of a file or directory in relation to the current directory. It doesn't start from the root directory and typically involves navigating up or down the directory hierarchy using symbols like ".." (parent directory) and directory names.
- **Absolute Path:** An absolute path specifies the precise location of a file or directory from the root of the file system. It begins with a forward slash ("/") in Linux and provides the full path from the root directory to the target file or directory. It doesn't depend on the current directory and remains constant regardless of where you are in the file system.