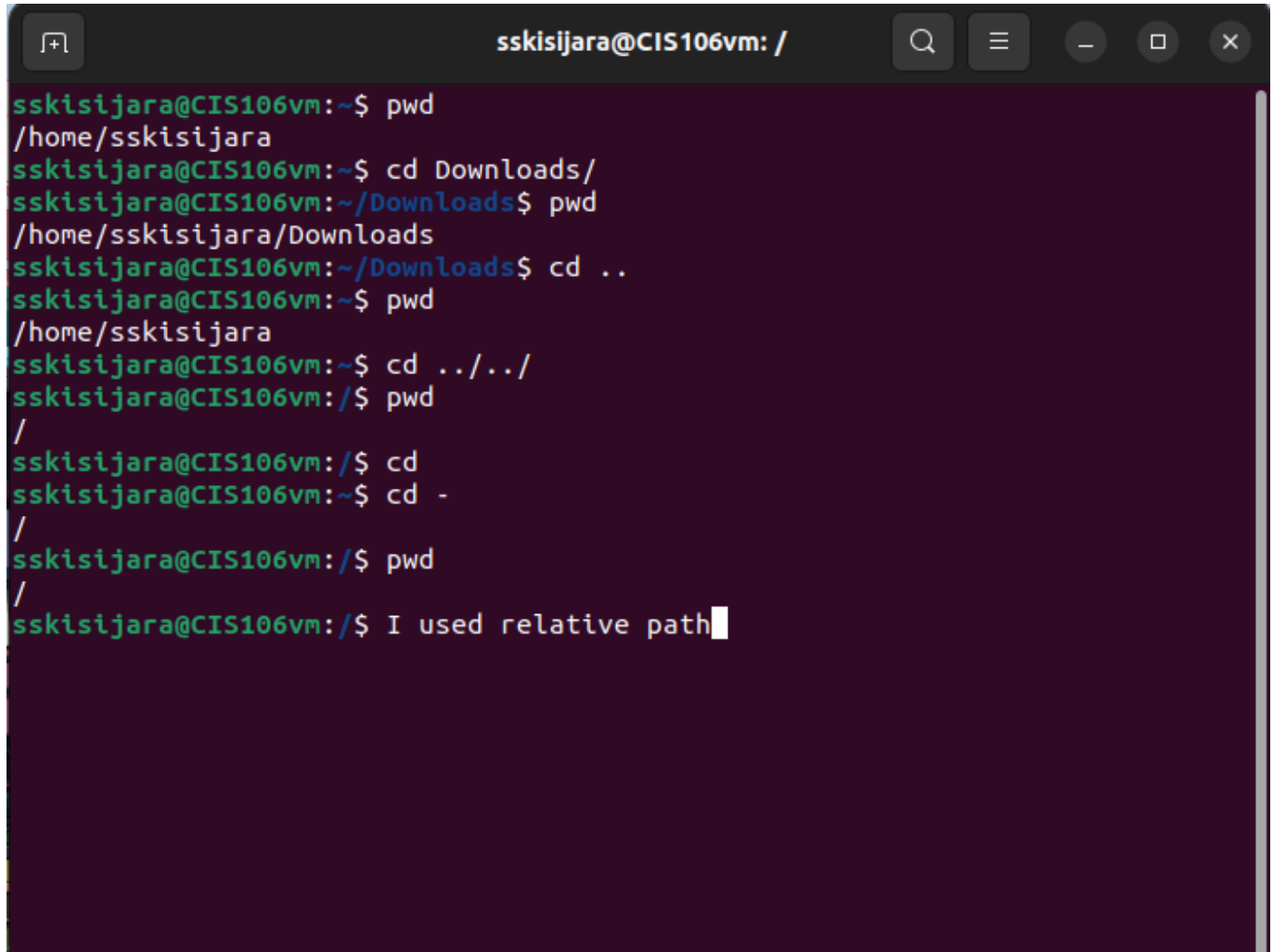


Week Report 4

1. Practice Exercises

a.

A terminal window titled 'sskisijsara@CIS106vm: /' with standard window controls. The terminal shows a series of commands and their outputs for navigating the file system. The user starts at their home directory, moves into the 'Downloads' subdirectory, then back to the parent directory, then to the root directory, and finally back to the home directory using relative paths. The final command is a statement about using relative paths.

```
sskisijsara@CIS106vm:~$ pwd
/home/sskisijsara
sskisijsara@CIS106vm:~$ cd Downloads/
sskisijsara@CIS106vm:~/Downloads$ pwd
/home/sskisijsara/Downloads
sskisijsara@CIS106vm:~/Downloads$ cd ..
sskisijsara@CIS106vm:~$ pwd
/home/sskisijsara
sskisijsara@CIS106vm:~$ cd ../../
sskisijsara@CIS106vm:/$ pwd
/
sskisijsara@CIS106vm:/$ cd
sskisijsara@CIS106vm:~$ cd -
/
sskisijsara@CIS106vm:/$ pwd
/
sskisijsara@CIS106vm:/$ I used relative path
```

b.

```

sskisijsara@CIS106vm: ~/practicels
[+]
sskisijsara@CIS106vm:/$ cd ~
sskisijsara@CIS106vm:~$ wget https://cis106.com/assets/practicels.tar.xz
--2022-10-13 18:43:27-- 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  5.72MB/s  in 0.4s

2022-10-13 18:43:28 (5.72 MB/s) - 'practicels.tar.xz' saved [2229212/2229212]

sskisijsara@CIS106vm:~$ tar Jxf practicels.tar.xz
sskisijsara@CIS106vm:~$ cd practicels/
sskisijsara@CIS106vm:~/practicels$ ls
book.txt      history-debian.pdf  movie.mp4      song.mp3      tux-penguin.gif
countries.xml  homework.docx      people.csv     tux-nobg.png
sskisijsara@CIS106vm:~/practicels$ ls -a
.   book.txt      history-debian.pdf  movie.mp4      song.mp3      tux-penguin.gif
..  countries.xml  homework.docx      people.csv     tux-nobg.png
sskisijsara@CIS106vm:~/practicels$ ls -l
total 2932
-rw-rw-r-- 1 sskisijsara sskisijsara 1043 Feb 27 2022 book.txt
-rw-rw-r-- 1 sskisijsara sskisijsara 23972 Feb 27 2022 countries.xml
-rw-rw-r-- 1 sskisijsara sskisijsara 163057 Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 sskisijsara sskisijsara 111303 Feb 22 2022 homework.docx
-rw-rw-r-- 1 sskisijsara sskisijsara 1570024 Feb 27 2022 movie.mp4
-rw-rw-r-- 1 sskisijsara sskisijsara 284042 Feb 27 2022 people.csv
-rw-rw-r-- 1 sskisijsara sskisijsara 764176 Feb 27 2022 song.mp3
-rw-rw-r-- 1 sskisijsara sskisijsara 21314 Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 sskisijsara sskisijsara 44299 Jan 31 2020 tux-penguin.gif
sskisijsara@CIS106vm:~/practicels$ ls -lh
total 2.9M
-rw-rw-r-- 1 sskisijsara sskisijsara 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 sskisijsara sskisijsara 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 sskisijsara sskisijsara 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 sskisijsara sskisijsara 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 sskisijsara sskisijsara 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 sskisijsara sskisijsara 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 sskisijsara sskisijsara 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 sskisijsara sskisijsara 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 sskisijsara sskisijsara 44K Jan 31 2020 tux-penguin.gif
sskisijsara@CIS106vm:~/practicels$

```

```
sskisijara@CIS106vm: ~/practicels
sskisijara@CIS106vm:~/practicels$ ls -lht
total 2.9M
-rw-rw-r-- 1 sskisijara sskisijara 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 sskisijara sskisijara 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 sskisijara sskisijara 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 sskisijara sskisijara 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 sskisijara sskisijara 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 sskisijara sskisijara 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 sskisijara sskisijara 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 sskisijara sskisijara 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 sskisijara sskisijara 44K Jan 31 2020 tux-penguin.gif
sskisijara@CIS106vm:~/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
sskisijara@CIS106vm:~/practicels$ ls -mr
tux-penguin.gif, tux-nobg.png, song.mp3, people.csv, movie.mp4, homework.docx, history-debian.pdf,
countries.xml, book.txt
sskisijara@CIS106vm:~/practicels$ ls -lX
people.csv
homework.docx
tux-penguin.gif
song.mp3
movie.mp4
history-debian.pdf
tux-nobg.png
book.txt
countries.xml
sskisijara@CIS106vm:~/practicels$
```

C.

```

sskisiijara@CIS106vm: ~
sskisiijara@CIS106vm:~/practicels$ pwd
/home/sskisiijara/practicels
sskisiijara@CIS106vm:~/practicels$ cd
sskisiijara@CIS106vm:~$ cd /
sskisiijara@CIS106vm:/ $ cd usr/share/themes
sskisiijara@CIS106vm:/usr/share/themes$ cd ../../
sskisiijara@CIS106vm:/usr$ ls -A ~
.bash_history  Downloads      Pictures      Templates
.bash_logout  gitcommands.txt .pki         .thunderbird
.bashrc       .gitconfig    practicels   .vboxclient-clipboard.pid
.cache       .gnupg        practicels.tar.xz .vboxclient-display-svga-x11.pid
cis-106-f22  installprograms.sh .profile     .vboxclient-draganddrop.pid
.cis106.png  .lessht      Public       .vboxclient-seamless.pid
.config      .local       snap        Videos
Desktop     .mozilla    .ssh       .vscode
Documents   Music       .sudo_as_admin_successful website
sskisiijara@CIS106vm:/usr$ cd; ls -tX cis-106-f22/
cheatsheets 'final project' labs 'week reports'
sskisiijara@CIS106vm:~$ ls -rR ~/cis-106-f22/
/home/sskisiijara/cis-106-f22/:
'week reports'  labs 'final project'  cheatsheets

'/home/sskisiijara/cis-106-f22/week reports':
week4 week3 week2

'/home/sskisiijara/cis-106-f22/week reports/week4':
wr4practice2.png wr4practice2.1.png wr4practice1.png

'/home/sskisiijara/cis-106-f22/week reports/week3':
wr3.pdf wr3.md page6.png examples2.png examples1.png

'/home/sskisiijara/cis-106-f22/week reports/week2':
wr2.pdf ubuntu2.png ubuntuone.png ubuntufive.png clientside.png
wr2.md  ubuntuthree.png ubuntufour.png serverside.png

/home/sskisiijara/cis-106-f22/labs:
'lab 4' 'lab 3' 'lab 2' 'lab 1'

'/home/sskisiijara/cis-106-f22/labs/lab 4':

'/home/sskisiijara/cis-106-f22/labs/lab 3':
wallhaven-9mjoy1.png q2.png linux.docx lab3.md
ubuntu-presentation.pptx linux.pdf lab3.pdf date-command.png

'/home/sskisiijara/cis-106-f22/labs/lab 2':
screenshots lab2.pdf lab2.md

```

```

sskisijsara@CIS106vm: ~
total 2.2M
drwxrwxr-x 7 sskisijsara sskisijsara 4.0K Oct 13 19:16 cis-106-f22
drwxr-xr-x 3 sskisijsara sskisijsara 4.0K Oct 13 18:17 Desktop
drwxr-xr-x 2 sskisijsara sskisijsara 4.0K Oct 2 17:34 Documents
drwxr-xr-x 5 sskisijsara sskisijsara 4.0K Oct 13 19:16 Downloads
-rw-rw-r-- 1 sskisijsara sskisijsara 48 Sep 30 19:01 gitcommands.txt
-rwxrwxr-x 1 sskisijsara sskisijsara 349 Sep 30 17:52 installprograms.sh
drwxr-xr-x 2 sskisijsara sskisijsara 4.0K Sep 22 13:32 Music
drwxr-xr-x 2 sskisijsara sskisijsara 4.0K Oct 12 18:52 Pictures
drwxrwxr-x 2 sskisijsara sskisijsara 4.0K Feb 27 2022 practicels
-rw-rw-r-- 1 sskisijsara sskisijsara 2.2M Oct 12 09:57 practicels.tar.xz
drwxr-xr-x 2 sskisijsara sskisijsara 4.0K Sep 22 13:32 Public
drwx----- 6 sskisijsara sskisijsara 4.0K Sep 30 18:00 snap
drwxr-xr-x 2 sskisijsara sskisijsara 4.0K Sep 22 13:32 Templates
drwxr-xr-x 2 sskisijsara sskisijsara 4.0K Sep 22 13:32 Videos
drwxrwxr-x 8 sskisijsara sskisijsara 4.0K Oct 12 18:35 website
sskisijsara@CIS106vm:~$ ls -lgG -full-time ~
ls: invalid option -- '-'
Try 'ls --help' for more information.
sskisijsara@CIS106vm:~$ ls -lgG -full time ~
ls: cannot access 'time': No such file or directory
/home/sskisijsara:
total 2324
drwxr-xr-x 2 4096 Oct 13 18:06 Templates
-rw-rw-r-- 1 2229212 Oct 13 18:45 practicels.tar.xz
-rwxrwxr-x 1 349 Sep 30 17:54 installprograms.sh
drwx----- 3 4096 Oct 3 19:42 .pki
drwxrwxr-x 2 4096 Oct 13 18:48 practicels
drwxr-xr-x 3 4096 Oct 13 18:17 Desktop
drwxrwxr-x 3 4096 Oct 3 19:42 .vscode
-rw-rw-r-- 1 48 Sep 30 19:01 gitcommands.txt
-rw----- 1 2254 Oct 12 18:11 .bash_history
drwxrwxr-x 7 4096 Oct 13 19:17 cis-106-f22
drwx----- 6 4096 Oct 13 18:06 snap
-rw-rw-r-- 1 3520 Oct 13 18:17 .cis106.png
drwxr-xr-x 5 4096 Oct 13 19:17 Downloads
drwx----- 3 4096 Oct 3 19:43 .mozilla
drwxr-xr-x 3 4096 Oct 13 18:06 ..
-rw-rw-r-- 1 66 Oct 5 15:36 .gitconfig
drwx----- 22 4096 Oct 3 19:43 .config
drwxrwxr-x 8 4096 Oct 13 19:17 website
drwxr-x--- 23 4096 Oct 13 19:03 .
drwxr-xr-x 2 4096 Oct 13 18:06 Videos
drwxr-xr-x 2 4096 Oct 12 18:52 Pictures
drwx----- 6 4096 Oct 3 19:43 .thunderbird
drwx----- 2 4096 Oct 5 21:02 .ssh
drwxr-xr-x 2 4096 Oct 13 18:06 Music

```

2.

Directory	Data Stored in Directory
bin	essential commands
dev	device files
etc	system configuration files
home	user home directories
media	mount point for removable media, such as DVDs and floppy disks
opt	add-on software packages
proc	kernel information, process control, system hardware information
srv	information relating to services that run on the system
usr	software not essential for system operation, such as applications

Directory	Data Stored in Directory		
var	dedicated to variable data, such as logs, databases, websites, and temporary spool(email etc.) files that persist from one boot to the next		
Command	What it does	Syntax	Example
pwd	displays the current working directory	pwd	pwd
cd	changes the current working directory. When no directory is given, cd changes the current working directory to the home directory of the current user	cd + destination	cd ~
ls	displays all the files inside a given directory. When no directory is specified, ls displays the files in the current working directory	ls + destination	ls -a

1. Definitions of following terms:

- File system: the way files are stored and organized to simplify access to data
- Current directory: directory where you are at the moment
- Parent directory: moving backwards to the previous directory
- Difference between **YOUR HOME** directory and **THE HOME** directory:
 1. "your home directory" refers to your user's home directory
 2. "the home directory" refers to the home directory located in the root
- Pathname: every file has which indicates the location of the file in 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
- Absolute path: the location of a file starting at the root of the file system

List of all the commands used for navigating the file system

- pwd
- cd
- ls
- tree
- dir
- exa