

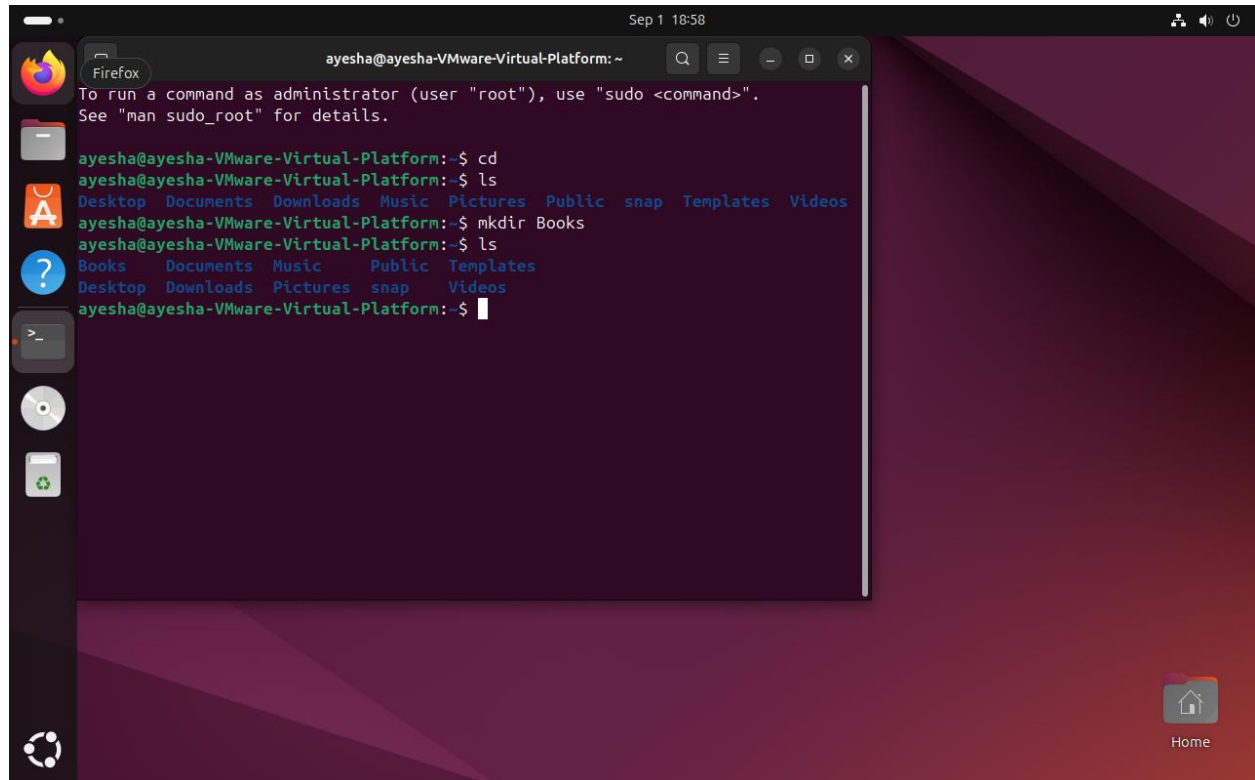
Ayesha Zubair

52916

OS Lab 3

Creating the Directory Structure

Books Directory

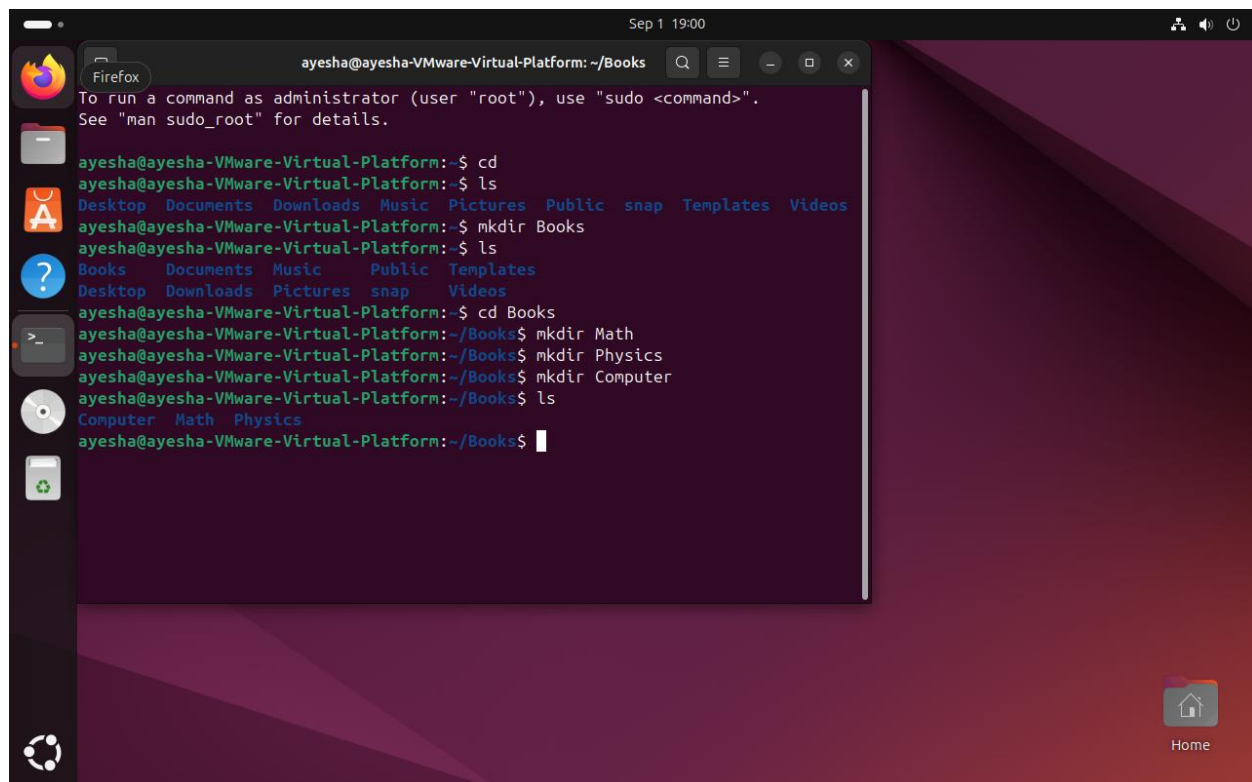


The screenshot shows a terminal window titled "ayesha@ayesha-VMware-Virtual-Platform: ~" with a search bar and window controls. The terminal output is as follows:

```
ayesha@ayesha-VMware-Virtual-Platform:~$ cd
ayesha@ayesha-VMware-Virtual-Platform:~$ ls
Desktop Documents Downloads Music Pictures Public snap Templates Videos
ayesha@ayesha-VMware-Virtual-Platform:~$ mkdir Books
ayesha@ayesha-VMware-Virtual-Platform:~$ ls
Books Documents Music Public Templates
Desktop Downloads Pictures snap Videos
ayesha@ayesha-VMware-Virtual-Platform:~$
```

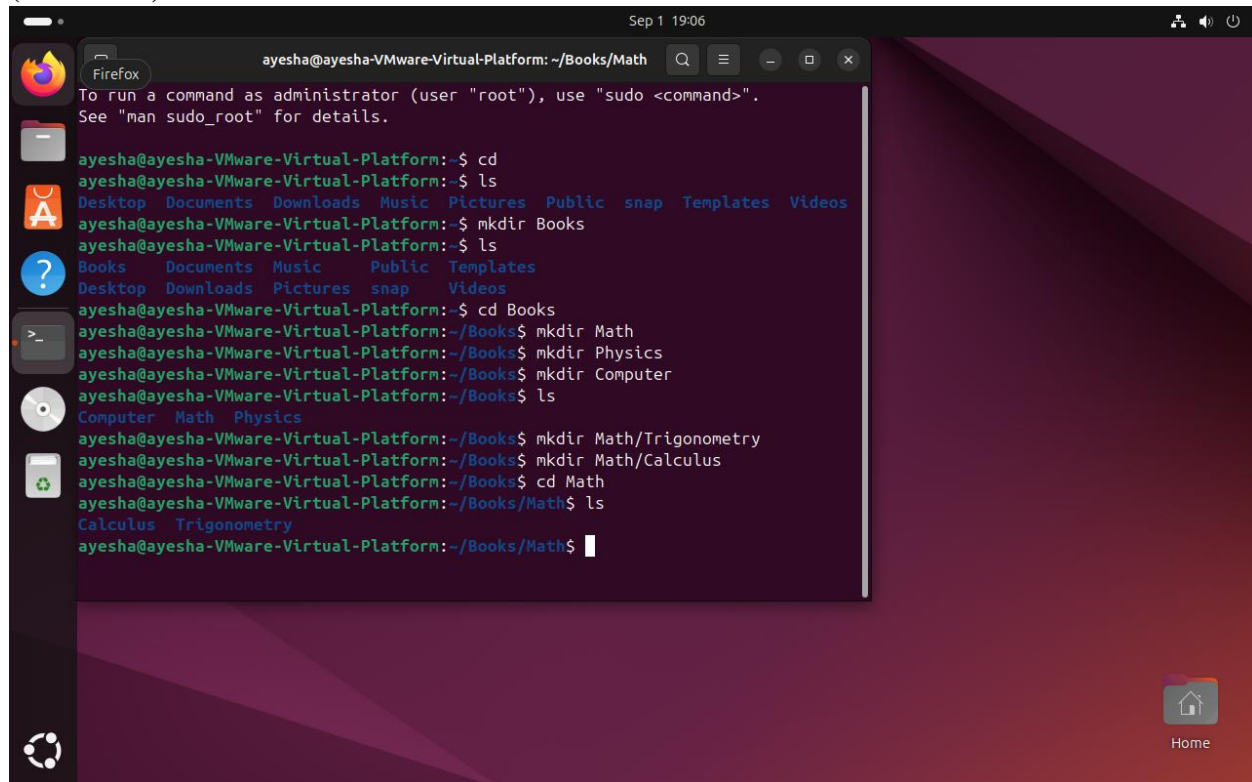
The desktop background is a dark purple gradient. A dock on the left contains icons for Firefox, a file manager, an application store, a help icon, a terminal, a CD/DVD drive, a trash can, and a refresh icon. A "Home" button with a house icon is located in the bottom right corner of the desktop.

Creating Directories: Math, Physics and Computer

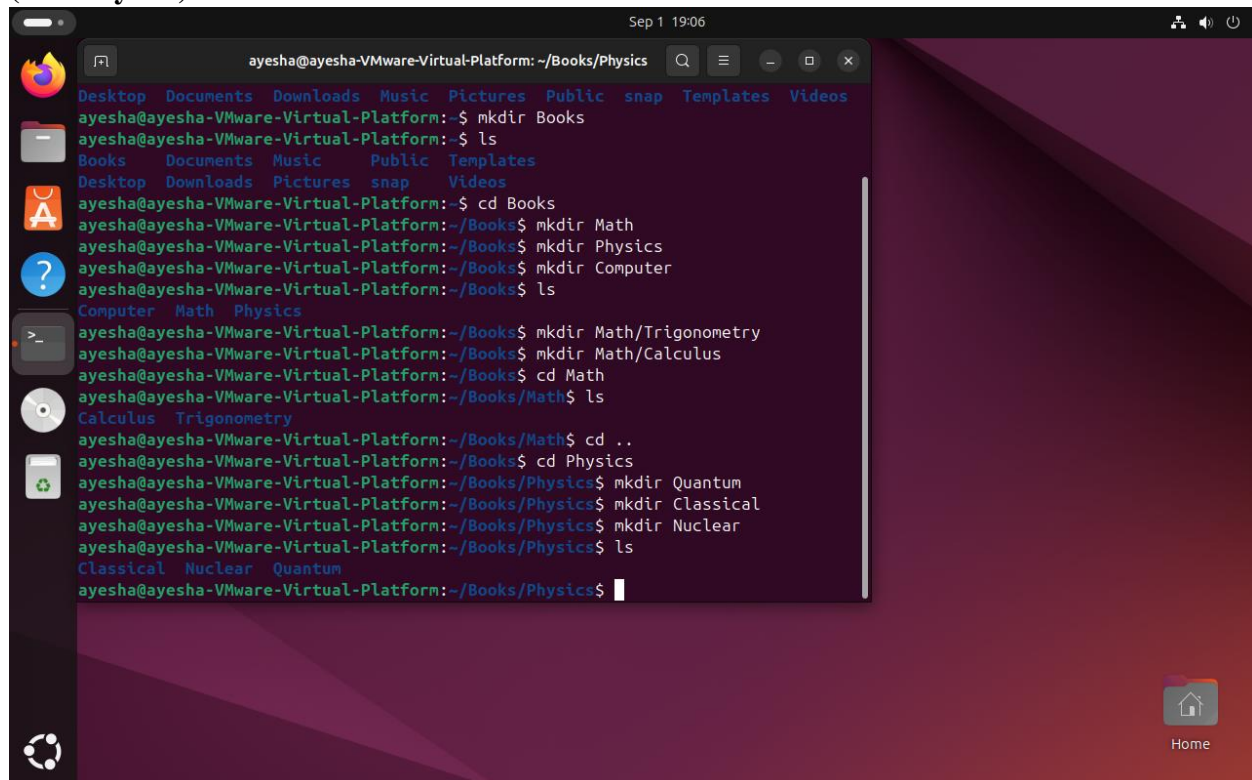


Creating subdirectories:

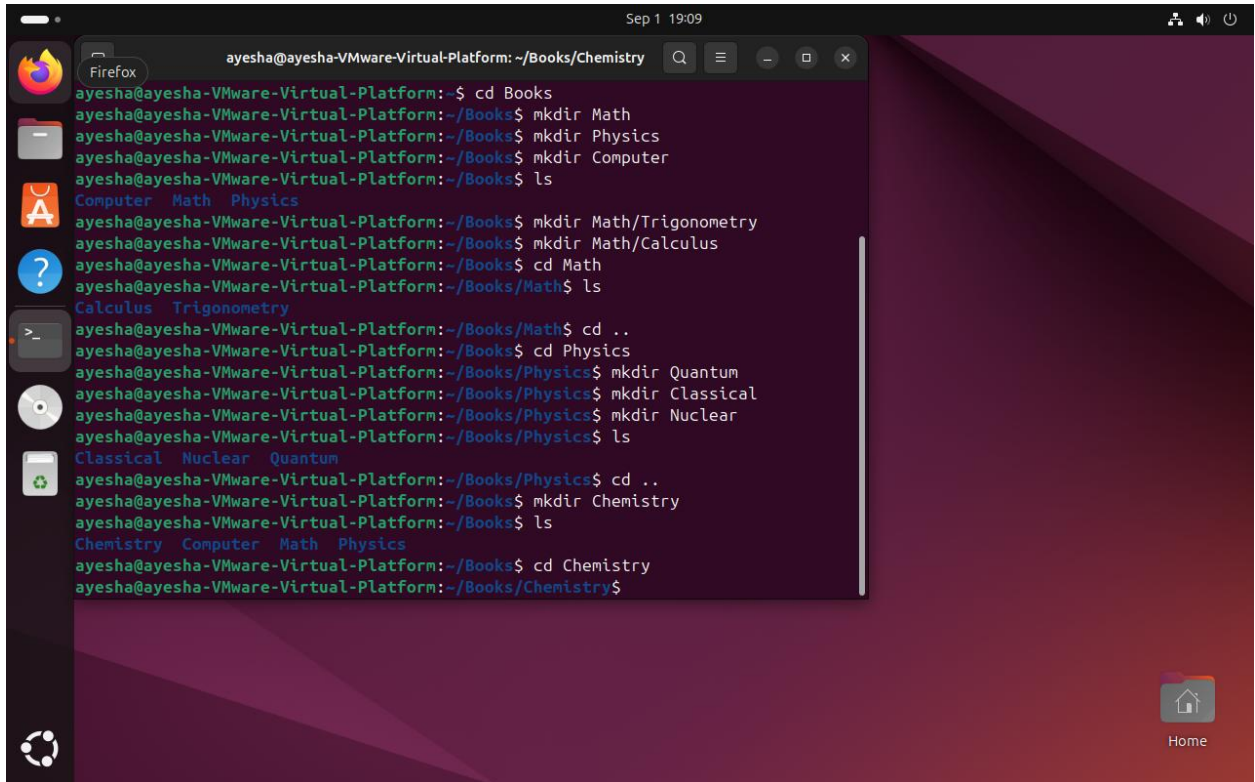
(For Math)



(For Physics)



Task 1: Creating Directory named Chemistry under Books

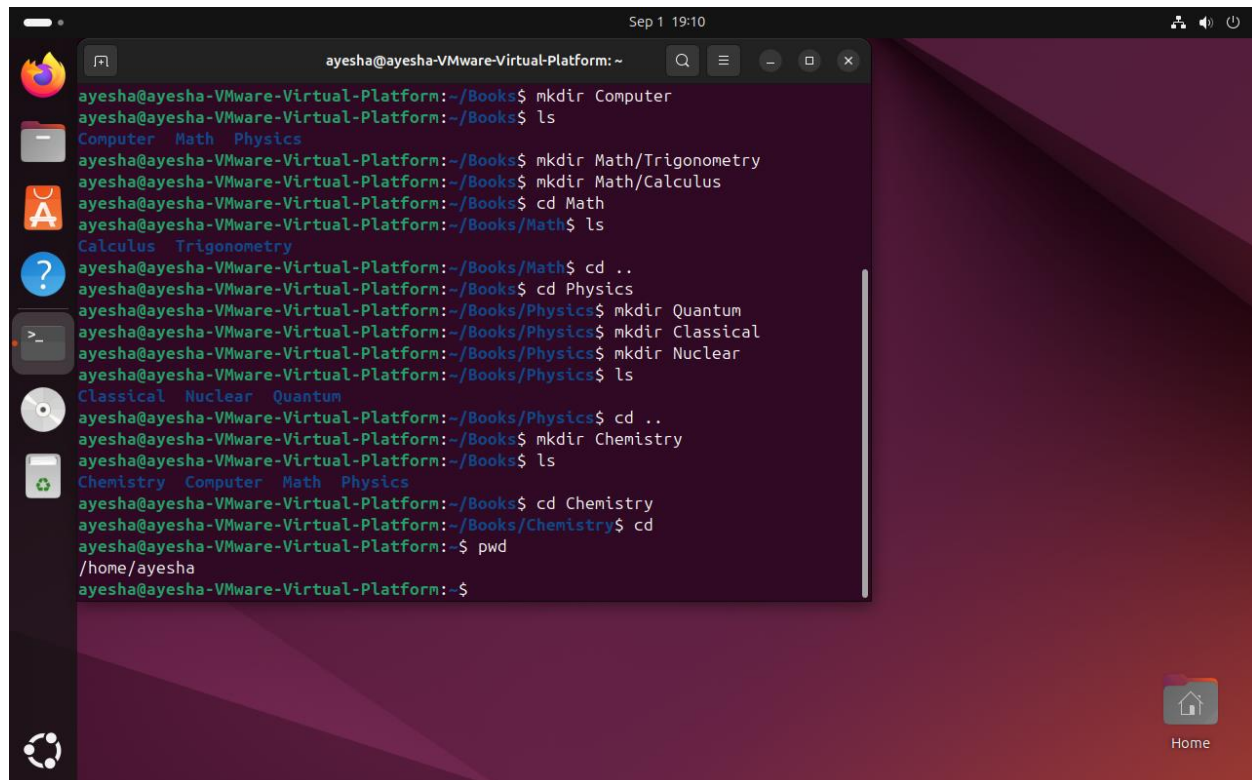


The screenshot shows a terminal window titled "ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Chemistry". The terminal displays the following commands and output:

```
ayesha@ayesha-VMware-Virtual-Platform:~$ cd Books
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ mkdir Math
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ mkdir Physics
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ mkdir Computer
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ ls
Computer  Math  Physics
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ mkdir Math/Trigonometry
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ mkdir Math/Calculus
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ cd Math
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Math$ ls
Calculus  Trigonometry
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Math$ cd ..
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ cd Physics
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics$ mkdir Quantum
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics$ mkdir Classical
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics$ mkdir Nuclear
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics$ ls
Classical  Nuclear  Quantum
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics$ cd ..
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ mkdir Chemistry
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ ls
Chemistry  Computer  Math  Physics
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ cd Chemistry
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Chemistry$
```

The terminal window is open on a desktop environment with a dark purple background. The desktop has a sidebar on the left with icons for Firefox, a file manager, a terminal, a help icon, a CD icon, and a trash icon. A "Home" button is visible in the bottom right corner of the desktop.

Go to Home directory directly from Chemistry:



Task 2: Going to Chemistry Directory directly:

The screenshot shows a terminal window titled 'ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Chemistry'. The terminal output is as follows:

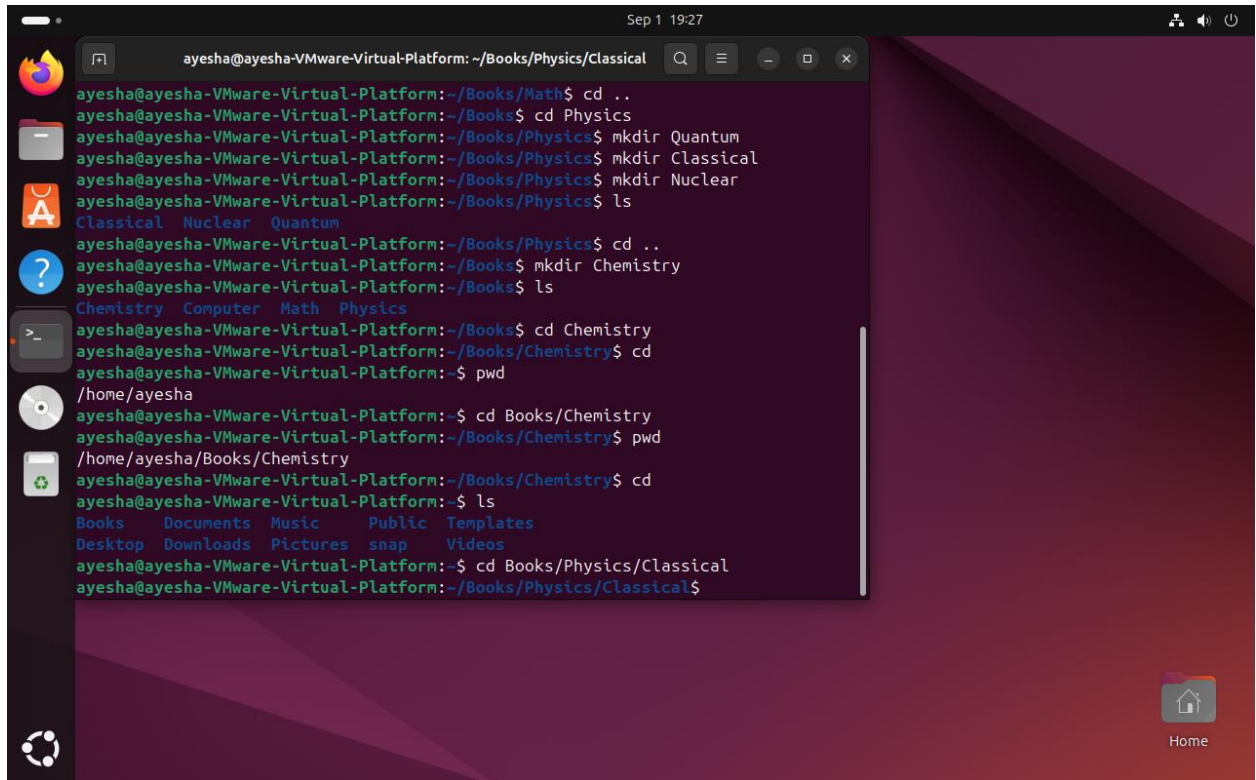
```
ayesha@ayesha-VMware-Virtual-Platform: ~/Books$ mkdir Math/Trigonometry
ayesha@ayesha-VMware-Virtual-Platform: ~/Books$ mkdir Math/Calculus
ayesha@ayesha-VMware-Virtual-Platform: ~/Books$ cd Math
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Math$ ls
Calculus  Trigonometry
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Math$ cd ..
ayesha@ayesha-VMware-Virtual-Platform: ~/Books$ cd Physics
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Physics$ mkdir Quantum
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Physics$ mkdir Classical
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Physics$ mkdir Nuclear
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Physics$ ls
Classical  Nuclear  Quantum
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Physics$ cd ..
ayesha@ayesha-VMware-Virtual-Platform: ~/Books$ mkdir Chemistry
ayesha@ayesha-VMware-Virtual-Platform: ~/Books$ ls
Chemistry  Computer  Math  Physics
ayesha@ayesha-VMware-Virtual-Platform: ~/Books$ cd Chemistry
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Chemistry$ cd
ayesha@ayesha-VMware-Virtual-Platform: ~$ pwd
/home/ayesha
ayesha@ayesha-VMware-Virtual-Platform: ~$ cd Books/Chemistry
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Chemistry$ pwd
/home/ayesha/Books/Chemistry
ayesha@ayesha-VMware-Virtual-Platform: ~/Books/Chemistry$
```

Question: What do you think books/chemistry is relative or absolute path?

Ans: books/chemistry starts from home directory. Absolute directory path always starts from root directory and since books/chemistry is starting from home directory, so it is relative path.

Task 3: How will you add a directory **graphics** under the directory computer while you are in **physics**' subdirectory **classical**?

In physics classical:



Creating directory Graphics in Computer

```
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics/Classical$ mkdir /home/ayesha/Books/Computer/Graphics
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics/Classical$ cd ..
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics$ cd ..
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ cd Computer
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Computer$ ls
Graphics
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Computer$
```

Task 4: You are in books directory, from here try to remove sub-directory quantum under the directory physics. Now move to directory computer, from here remove sub-directory calculus under the directory math.

Removing sub directory quantum under physics while being in Books:

```
ayesha@ayesha-VMware-Virtual-Platform:~$ cd Books
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ rmdir Physics/Quantum
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ ls
Chemistry  Computer  Math  Physics
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ cd Physics
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics$ ls
Classical  Nuclear
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics$
```

Now move to directory computer, from here remove sub-directory calculus under the directory math.

```
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Physics$ cd ..
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ cd Computer
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Computer$ rmdir /home/ayesha/Books/Math/Calculus
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Computer$ cd ..
ayesha@ayesha-VMware-Virtual-Platform:~/Books$ cd Math
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Math$ ls
Trigonometry
ayesha@ayesha-VMware-Virtual-Platform:~/Books/Math$
```

Task 5: Which are the Linux Directory Commands? Explain the understanding of commands in your own words.

Linux directory commands are used to navigate different directories and subdirectories. They are also used to create or remove directories and subdirectories.

Some linux commands are:

Pwd: it gives the path of the directory in which we are currently present

Ls or dir: lists down all the files present in a directory

La -a: lists all the files, even the hidden files

Ls -l: displays all the files with its details, for e.g. date created

Ls -r: lists all the files in reverse order

Cd: command used to change directory

Cd : command that takes to home directory

Cd/: command that takes to root directory

Cd .. : command that takes to parent directory (1 directory above in a hierarchal structure)

Mkdir: used to create a directory or subdirectory

Rmdir: used to remove a directory or a subdirectory

Rm -r: this command is used to delete a directory when it is non empty.