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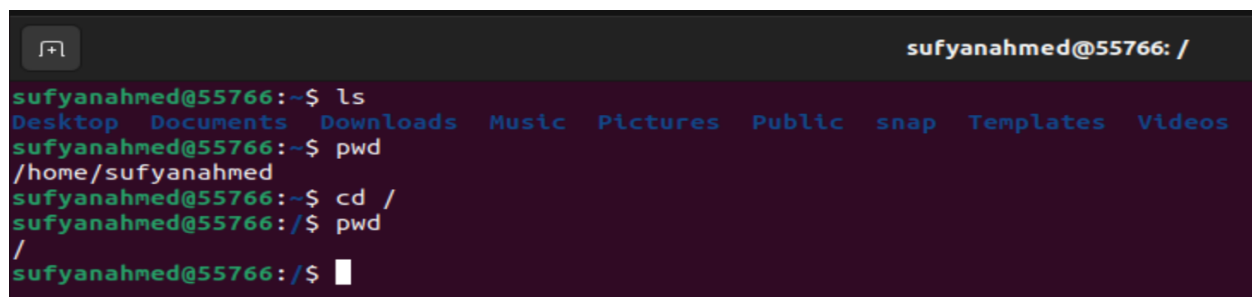
Sap: **55766**

Section: **5-2**

OS Lab 03

Task01:

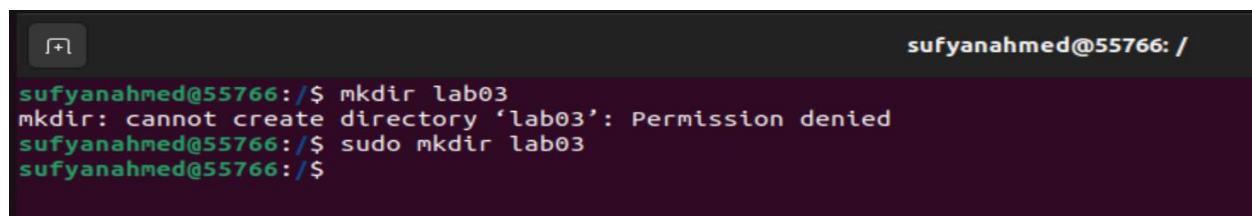
Changing to Home Directory

A terminal window with a dark background and light green text. The title bar shows a window icon and the text 'sufyanahmed@55766: /'. The terminal content shows a series of commands and their outputs: 'ls' lists directories (Desktop, Documents, Downloads, Music, Pictures, Public, snap, Templates, Videos); 'pwd' shows the current directory as '/home/sufyanahmed'; 'cd /' changes the directory to the root; another 'pwd' confirms the current directory is '/'.

```
sufyanahmed@55766:~$ ls
Desktop Documents Downloads Music Pictures Public snap Templates Videos
sufyanahmed@55766:~$ pwd
/home/sufyanahmed
sufyanahmed@55766:~$ cd /
sufyanahmed@55766:/$ pwd
/
sufyanahmed@55766:/$
```

Task02:

Creating Directory “lab03”

A terminal window with a dark background and light green text. The title bar shows a window icon and the text 'sufyanahmed@55766: /'. The terminal content shows two commands: 'mkdir lab03' which fails with the message 'mkdir: cannot create directory 'lab03': Permission denied', and 'sudo mkdir lab03' which is entered but its output is not visible.

```
sufyanahmed@55766:/$ mkdir lab03
mkdir: cannot create directory 'lab03': Permission denied
sufyanahmed@55766:/$ sudo mkdir lab03
sufyanahmed@55766:/$
```

Task03:

List the Directories

```
sufyanahmed@55766: /  
sufyanahmed@55766:/$ ls  
bin  cdrom  etc  lab03  lib32  libx32  media  opt  root  sbin  srv  
boot dev  home lib  lib64  lost+found  mnt  proc  run  snap  swapfile  
sufyanahmed@55766:/$
```

Task04:

Changing Directory “lab03”

```
sufyanahmed@55766: /lab03  
sufyanahmed@55766:/$ ls  
bin  cdrom  etc  lab03  lib32  libx32  media  opt  root  sbin  srv  s  
boot dev  home lib  lib64  lost+found  mnt  proc  run  snap  swapfile  t  
sufyanahmed@55766:/$ cd lab03  
sufyanahmed@55766: /lab03$
```

Task05:

Verifying Directory “lab03”

```
sufyanahmed@55766: /lab03  
sufyanahmed@55766:/$ ls  
bin  cdrom  etc  lab03  lib32  libx32  media  opt  root  sbin  srv  sys  
boot dev  home lib  lib64  lost+found  mnt  proc  run  snap  swapfile  tmp  
sufyanahmed@55766:/$ cd lab03  
sufyanahmed@55766: /lab03$ pwd  
/lab03  
sufyanahmed@55766: /lab03$
```

Task06:

Creating Hierarchy

```
sufyanahmed@55766: /lab03/books

sufyanahmed@55766:/$ ls
bin  cdrom  etc  lab03  lib32  libx32  media  opt  root  sbin  srv  sys  usr
boot  dev  home  lib  lib64  lost+found  mnt  proc  run  snap  swapfile  tmp  var
sufyanahmed@55766:/$ cd lab03
sufyanahmed@55766:/lab03$ pwd
/lab03
sufyanahmed@55766:/lab03$ sudo mkdir books
sufyanahmed@55766:/lab03$ cd books
sufyanahmed@55766:/lab03/books$ sudo mkdir math
sufyanahmed@55766:/lab03/books$ sudo mkdir physics
sufyanahmed@55766:/lab03/books$ sudo mkdir computer
sufyanahmed@55766:/lab03/books$ ls
computer  math  physics
sufyanahmed@55766:/lab03/books$ cd math
sufyanahmed@55766:/lab03/books/math$ sudo mkdir trigonometry
sufyanahmed@55766:/lab03/books/math$ ls
trigonometry
sufyanahmed@55766:/lab03/books/math$ cd ..
sufyanahmed@55766:/lab03/books$ cd math
sufyanahmed@55766:/lab03/books/math$ sudo mkdir calculus
sufyanahmed@55766:/lab03/books/math$ cd ..
sufyanahmed@55766:/lab03/books$ cd physics
sufyanahmed@55766:/lab03/books/physics$ sudo mkdir quantum
sufyanahmed@55766:/lab03/books/physics$ sudo mkdir classical
sufyanahmed@55766:/lab03/books/physics$ sudo mkdir nuclear
sufyanahmed@55766:/lab03/books/physics$ ls
classical  nuclear  quantum
classical  nuclear  quantum
```

```
sufyanahmed@55766: /lab03/books/physics

sufyanahmed@55766:/lab03/books$ ls
computer  math  physics
sufyanahmed@55766:/lab03/books$ cd computer
sufyanahmed@55766:/lab03/books/computer$ ls
sufyanahmed@55766:/lab03/books/computer$ cd ..
sufyanahmed@55766:/lab03/books$ cd math
sufyanahmed@55766:/lab03/books/math$ ls
calculus  trigonometry
sufyanahmed@55766:/lab03/books/math$ cd ..
sufyanahmed@55766:/lab03/books$ cd physics
sufyanahmed@55766:/lab03/books/physics$ ls
classical  nuclear  quantum
sufyanahmed@55766:/lab03/books/physics$ ls
classical  nuclear  quantum
```

```
sufyanahmed@55766: /lab03

sufyanahmed@55766:/lab03$ ls -R
.:
books

./books:
computer  math  physics

./books/computer:

./books/math:
calculus  trigonometry

./books/math/calculus:

./books/math/trigonometry:

./books/physics:
classical  nuclear  quantum

./books/physics/classical:

./books/physics/nuclear:

./books/physics/quantum:
sufyanahmed@55766:/lab03$
```