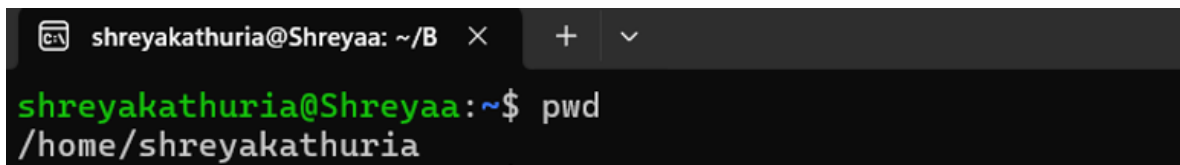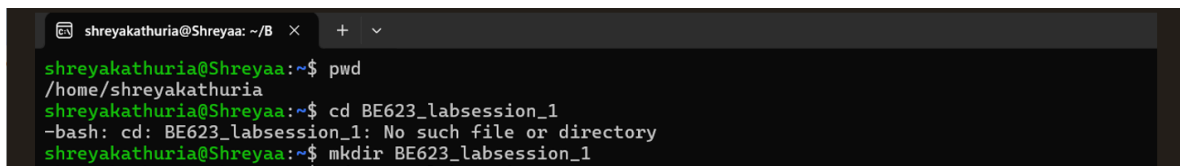**Indian Institute of Technology Gandhinagar**
BE623 Biocomputing
Sem1 2025-2026

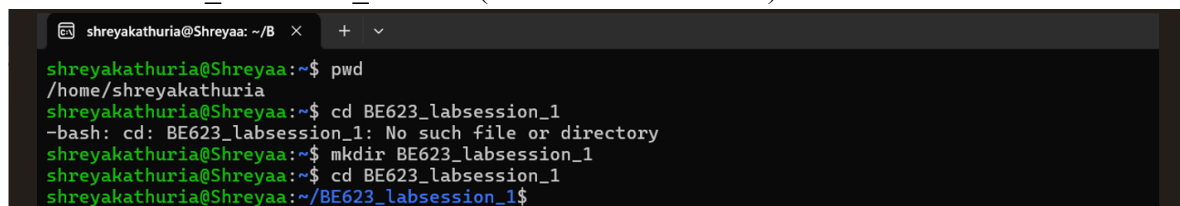# Lab session –1
(Shell, Filesystem and Permissions)

1- Open terminal and find out the path of the folder being displayed in the terminal.
(Hint- Use pwd command to check the current location in terminal and cd command to change the directory)

2- Change directory to the folder with files uploaded on classroom. Create a new folder

named "BE623_labsession_1" (Hint- Use mkdir command)

3- Enter BE623_labsession_1 folder (Hint use cd command)

4- Confirm that your current folder is "BE623_labsession_1" (Hint use pwd command)

5- List all the files and folders in the directory (Hint use ls command)

6- Copy "sequence.fasta and protein.fasta" file to current folder

7- List all the files and folders in the directory (Hint use ls command)

```
shreyakathuria@Shreyaa:~/BE623_labsession_1$ ls
protein.fasta  sequence.fasta
shreyakathuria@Shreyaa:~/BE623_labsession_1$ ls
protein.fasta  sequence.fasta
shreyakathuria@Shreyaa:~/BE623_labsession_1$ |
```

8- Find out if there is any hidden file or folder in the directory (Hint: ls -al)

```
shreyakathuria@Shreyaa:~/BE623_labsession_1$ ls
protein.fasta  sequence.fasta
shreyakathuria@Shreyaa:~/BE623_labsession_1$ ls -al
total 92
drwxr-xr-x 2 shreyakathuria shreyakathuria  4096 Aug 11 07:40 .
drwxr-x--- 9 shreyakathuria shreyakathuria  4096 Aug 11 07:30 ..
-rwxrwxrwx 1 shreyakathuria shreyakathuria   467 Aug  9 13:05 protein.fasta
-rwxr-xr-x 1 shreyakathuria shreyakathuria 79551 Aug 11 07:40 sequence.fasta
shreyakathuria@Shreyaa:~/BE623_labsession_1$
```

9- Find out permissions associated with files in the folder (Hint: ls -al)

```
shreyakathuria@Shreyaa:~/BE623_labsession_1$ ls -l
total 84
-rwxrwxrwx 1 shreyakathuria shreyakathuria   467 Aug  9 13:05 protein.fasta
-rwxr-xr-x 1 shreyakathuria shreyakathuria 79551 Aug 11 07:40 sequence.fasta
shreyakathuria@Shreyaa:~/BE623_labsession_1$
```

10- Find out the permissions of the files and folders in /

11- Change the permissions of the file "protein.fasta" so that it is readable, writable and

executable by everyone (Hint use chmod).

Change the permissions back to what they were.

```
shreyakathuria@Shreyaa:~/BE623_labsession_1$ chmod a+rwx protein.fasta
shreyakathuria@Shreyaa:~/BE623_labsession_1$ ls-l
ls-l: command not found
shreyakathuria@Shreyaa:~/BE623_labsession_1$ ls -l
total 84
-rwxrwxrwx 1 shreyakathuria shreyakathuria   467 Aug  9 13:05 protein.fasta
-rwxr-xr-x 1 shreyakathuria shreyakathuria 79551 Aug 11 07:40 sequence.fasta
shreyakathuria@Shreyaa:~/BE623_labsession_1$ |
```