Lab assignment 1 | Anchal Kaushik | 24410001

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)

output:

```
anchal@hp:~$ pwd
/home/anchal
anchal@hp:~$ cd
anchal@hp:~$ |
```

2- Change directory to the folder with files uploaded on classroom. Create a new folder named "BE623_labsession_1" (Hint- Use mkdir command)

output:

```
anchal@hp:/mnt/c/Users/kaush$ cd /mnt/c/Users/kaush/Downloads
anchal@hp:/mnt/c/Users/kaush/Downloads$ mkdir "BE623_labsession_1"
anchal@hp:/mnt/c/Users/kaush/Downloads$ |
```

3- Enter BE623 labsession 1 folder (Hint use cd command)

Output:

```
anchal@hp:/mnt/c/Users/kaush/Downloads$ cd BE623_labsession_1
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ |
```

4- Confirm that your current folder is "BE623 labsession 1" (Hint use pwd command)

Output:

```
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ pwd
/mnt/c/Users/kaush/Downloads/BE623_labsession_1
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ |
```

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

Output:

```
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ ls
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ |
```

6- Copy "sequence.fasta and protein.fasta" file to current folder (Hint cp ../sequence.fasta ./)

Output:

```
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ cp ../seque
nce.fasta ./
cp ../protein.fasta ./
```

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

Output:

```
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ ls
protein.fasta sequence.fasta
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ |
```

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

Output:

```
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ ls -al total 80
drwxrwxrwx 1 anchal anchal 512 Aug 31 10:14
drwxrwxrwx 1 anchal anchal 512 Aug 31 10:08
-rwxrwxrwx 1 anchal anchal 467 Aug 31 10:14 protein.fasta
-rwxrwxrwx 1 anchal anchal 79551 Aug 31 10:14 sequence.fasta
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$
```

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

Output:

```
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ ls -al total 80
drwxrwxrwx 1 anchal anchal 512 Aug 31 10:14
drwxrwxrwx 1 anchal anchal 512 Aug 31 10:08
-rwxrwxrwx 1 anchal anchal 467 Aug 31 10:14 protein.fasta
-rwxrwxrwx 1 anchal anchal 79551 Aug 31 10:14 sequence.fasta
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$
```

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

Output:

```
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ ls -al /
total 2748
drwxr-xr-x
            22 root root
                            4096 Aug 31 09:48 .
                            4096 Aug 31 09:48 ...
drwxr-xr-x
            22 root root
             1 root root
                               7 Apr 22
                                         2024 bin -> usr/bin
lrwxrwxrwx
             2 root root
                            4096 Feb 26
drwxr-xr-x
                                         2024 bin.usr-is-merged
             2 root root
                            4096 Apr 22
                                         2024 boot
drwxr-xr-x
                            3860 Aug 31 09:49 dev
drwxr-xr-x
            15 root root
                            4096 Aug 31 09:49 etc
drwxr-xr-x
            88 root root
                            4096 Aug 12 11:08 home
            3 root root
drwxr-xr-x
             1 root root 2724480 Jul 31 14:56 init
-rwxrwxrwx
lrwxrwxrwx
             1 root root
                               7 Apr 22
                                         2024 lib -> usr/lib
drwxr-xr-x
             2 root root
                            4096 Apr 8
                                         2024 lib.usr-is-merged
lrwxrwxrwx
             1 root root
                               9 Apr 22
                                         2024 lib64 -> usr/lib64
             2 root root
                           16384 Aug 12 11:07 lost+found
drwx----
             2 root root
                            4096 Aug
                                     5 16:55 media
drwxr-xr-x
             5 root root
                            4096 Aug 12 11:07 mnt
drwxr-xr-x
             2 root root
                            4096 Aug 5 16:55 opt
drwxr-xr-x
dr-xr-xr-x 190 root root
                               0 Aug 31 09:48 proc
                            4096 Aug 5 16:57 root
            3 root root
drwx-
                             560 Aug 31 09:49 run
drwxr-xr-x
           19 root root
                                         2024 sbin -> usr/sbin
lrwxrwxrwx
             1 root root
                               8 Apr 22
             2 root root
                            4096 Mar 31
                                        2024 sbin.usr-is-merged
drwxr-xr-x
            2 root root
drwxr-xr-x
                            4096 Aug 12 11:07 snap
drwxr-xr-x
           2 root root
                            4096 Aug
                                     5 16:55 srv
                               0 Aug 31 09:48 sys
           13 root root
dr-xr-xr-x
            8 root root
                            4096 Aug 31 09:49 tmp
drwxrwxrwt
                            4096 Aug 5 16:55 usr
           12 root root
drwxr-xr-x
drwxr-xr-x 13 root root
                            4096 Aug 12 11:07 var
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ |
```

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.

Output: I tried changing permissions using chmod 644 protein.fasta, but since the folder is on a Windows-mounted drive (/mnt/c/...), the permissions did not change as expected. On a native Linux file system, the permissions would change to -rw-r--r--.

```
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ chmod 777 protein.fasta anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ ls -l total 80
-rwxrwxrwx 1 anchal anchal 467 Aug 31 10:14 protein.fasta
-rwxrwxrwx 1 anchal anchal 79551 Aug 31 10:14 sequence.fasta
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ chmod 644 protein.fasta
anchal@hp:/mnt/c/Users/kaush/Downloads/BE623_labsession_1$ ls -l
total 80
-rwxrwxrwx 1 anchal anchal 467 Aug 31 10:14 protein.fasta
-rwxrwxrwx 1 anchal anchal 79551 Aug 31 10:14 sequence.fasta
```