

Assignment 2

1. List the directory contents date wise sorted. (man ls)

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ ls -t -l
total 4
-rw-rw-r-- 1 sunbeam sunbeam 0 Oct 27 18:43 d.txt
-rw-rw-r-- 1 sunbeam sunbeam 0 Oct 27 18:43 c.txt
-rw-rw-r-- 1 sunbeam sunbeam 0 Oct 27 18:43 b.txt
-rw-rw-r-- 1 sunbeam sunbeam 33 Oct 27 18:04 a.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ ls -t
d.txt c.txt b.txt a.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$
```

2. List the directory contents size wise sorted.(man ls)

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ ls -S -l
total 4
-rw-rw-r-- 1 sunbeam sunbeam 33 Oct 27 18:04 a.txt
-rw-rw-r-- 1 sunbeam sunbeam 0 Oct 27 18:43 b.txt
-rw-rw-r-- 1 sunbeam sunbeam 0 Oct 27 18:43 c.txt
-rw-rw-r-- 1 sunbeam sunbeam 0 Oct 27 18:43 d.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ ls -S
a.txt b.txt c.txt d.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ ls
a.txt b.txt c.txt d.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$
```

3. List directory contents along with their inode no. (man ls)

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ man ls
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ ls -li
4194734 a.txt 4201094 b.txt 4201517 c.txt 4201523 d.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$
```

4. List the contents of the subdirectory.

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop$ ls */
demo/:
a.txt  b.txt  c.txt  d.txt

test/:
c.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop$
```

5. Create a file, write your surname and name in it and save.

i. now open the same file and add your address in it and save.

ii. reopen the same file and check your name and address in it.

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ cat > test.txt
Shubham
Bhambure
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ cat >> test.txt
Katraj,Pune
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ cat test.txt
Shubham
Bhambure
Katraj,Pune
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$
```

6. how to change the time stamp of file (man touch)

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ stat test.txt
  File: test.txt
  Size: 29          Blocks: 8          IO Block: 4096   regular file
Device: 804h/2052d Inode: 4202178      Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/  sunbeam)   Gid: ( 1000/  sunbeam)
Access: 2025-10-27 19:04:51.455344768 +0530
Modify: 2025-10-27 19:04:45.707415791 +0530
Change: 2025-10-27 19:04:45.707415791 +0530
 Birth: 2025-10-27 19:04:09.523866064 +0530
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ touch test.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$ stat test.txt
  File: test.txt
  Size: 29          Blocks: 8          IO Block: 4096   regular file
Device: 804h/2052d Inode: 4202178      Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/  sunbeam)   Gid: ( 1000/  sunbeam)
Access: 2025-10-27 19:07:25.722596815 +0530
Modify: 2025-10-27 19:07:25.722596815 +0530
Change: 2025-10-27 19:07:25.722596815 +0530
 Birth: 2025-10-27 19:04:09.523866064 +0530
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/demo$
```

7. Create directory structure : Give following commands ,

- > mkdir one
- > cd one
- > touch 1.txt 11.txt 111.txt
- > mkdir two
- > cd two
- > touch 2.txt 22.txt 222.txt
- > mkdir three
- > cd three
- > touch 3.txt 33.txt 333.txt
- > mkdir four
- > cd four
- > touch 4.txt 44.txt 444.txt
- > mkdir five
- > cd five
- > touch 5.txt 55.txt 555.txt
- > cd ~ (i.e. go to your home directory)

```

sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop$ mkdir one
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop$ ls
demo one test
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop$ touch 1.txt 11.txt 111.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop$ mkdir two
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop$ cd two
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two$ touch 2.txt 22.txt 222.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two$ mkdir three
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two$ cd three
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two/three$ cd three
bash: cd: three: No such file or directory
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two/three$ touch 3.txt 33.txt 333.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two/three$ mkdir four
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two/three$ cd four
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two/three/four$ touch 4.txt 44.txt 444.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two/three/four$ mkdir five
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two/three/four$ cd five
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two/three/four/five$ touch 5.txt 55.txt 555.t
xt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/two/three/four/five$ cd ~

```

8. Considering above directory structure , Do following operations :

i. list the directory contents of directory named "five" from current directory (i.e. home directory).

/home/sunbeam/Desktop/one/two/three/four/five

```

sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$ cd ~
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$ ls /home/sunbeam/Desktop/one/two/three/four/five
555.txt 55.txt 5.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$

```

ii. write your name in a file named "44.txt" of directory "four" from current directory.

```

sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$ cat > /home/sunbeam/Desktop/one/two/three/four/44.tx
t
Shubham
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$ cat /home/sunbeam/Desktop/one/two/three/four/44.txt
Shubham
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$

```

iii. remove the file named "555.txt" from directory "five" from current directory.

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$ ls /home/sunbeam/Desktop/one/two/three/four/five
555.txt  55.txt  5.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$ rm /home/sunbeam/Desktop/one/two/three/four/five/555
.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$ ls /home/sunbeam/Desktop/one/two/three/four/five
55.txt  5.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$ █
```

iv. change directory to five(i.e. cd one/two/three/four/five/).

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~$ cd /home/sunbeam/Desktop/one/two/three/four/five
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$
```

v. write your course name in file named "3.txt" which resides in directory "three" from current directory (i.e. five).also read the same file.

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$ cat ../../3.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$ cat > ../../3.txt
DAC
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$ cat ../../3.txt
DAC
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$
```

vi. list the contents of directory "two" from current directory (i.e. five).

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$ ls ../../../
222.txt  22.txt  2.txt  three
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$
```

vii. remove file named "222.txt" which belongs to directory "two" from current directory (i.e. five)

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$ ls ../../../
222.txt 22.txt 2.txt three
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$ rm ../../../222.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$ ls ../../../
22.txt 2.txt three
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$
```

viii. now change the directory to "one"

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one/two/three/four/five$ cd ../../../../../../
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one$
```

ix. remove all files only from directory named "five" from current directory (i.e. one)

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one$ ls /home/sunbeam/Desktop/one/two/three/four/five/
555.txt 55.txt 5.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one$ rm /home/sunbeam/Desktop/one/two/three/four/five/*.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one$ ls /home/sunbeam/Desktop/one/two/three/four/five/
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one$
```

x. remove directory named "five" from current directory (i.e. one)

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one$ rmdir /home/sunbeam/Desktop/one/two/three/four/five
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one$ /home/sunbeam/Desktop/one/two/three/four
bash: /home/sunbeam/Desktop/one/two/three/four: Is a directory
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one$ ls /home/sunbeam/Desktop/one/two/three/four
444.txt 44.txt 4.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA:~/Desktop/one$
```

xi. remove whole directory named "four" from current directory (i.e. one)

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~/Desktop/one$ ls /home/sunbeam/Desktop/one/two/three/four
444.txt 44.txt 4.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~/Desktop/one$ rm -r /home/sunbeam/Desktop/one/two/three/four
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~/Desktop/one$ ls /home/sunbeam/Desktop/one/two/three
333.txt 33.txt 3.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~/Desktop/one$
```

xii. change to your home directory.

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~/Desktop/one$ cd ~
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~$
```

9. change the time stamp of file named "3.txt" which resides in directory named "three".(man touch)

```
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~/Desktop/one$ cd ~
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~$ stat /home/sunbeam/Desktop/one/two/three/3.txt
  File: /home/sunbeam/Desktop/one/two/three/3.txt
  Size: 4          Blocks: 8          IO Block: 4096   regular file
Device: 804h/2052d Inode: 4201900    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/  sunbeam)   Gid: ( 1000/  sunbeam)
Access: 2025-10-27 21:14:59.282936882 +0530
Modify: 2025-10-27 21:14:44.169937355 +0530
Change: 2025-10-27 21:14:44.169937355 +0530
 Birth: 2025-10-27 20:52:44.622978631 +0530
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~$ touch /home/sunbeam/Desktop/one/two/three/3.txt
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~$ stat /home/sunbeam/Desktop/one/two/three/3.txt
  File: /home/sunbeam/Desktop/one/two/three/3.txt
  Size: 4          Blocks: 8          IO Block: 4096   regular file
Device: 804h/2052d Inode: 4201900    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/  sunbeam)   Gid: ( 1000/  sunbeam)
Access: 2025-10-27 21:40:48.418888424 +0530
Modify: 2025-10-27 21:40:48.418888424 +0530
Change: 2025-10-27 21:40:48.418888424 +0530
 Birth: 2025-10-27 20:52:44.622978631 +0530
sunbeam@sunbeam-VivoBook-ASUSLaptop-X515JA-X515JA: ~$
```