

## Assignment 2

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

```
Activities Terminal ▾ Oct 8 7:  
[+] sunbeam@sunbeam-HP-Laptop-15-bs1xx:~$ ls -lt  
hello from bashrc  
total 3432  
drwxr-xr-x 6 sunbeam sunbeam 4096 Oct  8 19:09 Desktop  
drwxrwxr-x 4 sunbeam sunbeam 4096 Oct  8 19:06 os  
drwxr-xr-x 3 sunbeam sunbeam 4096 Oct  8 17:03 Downloads  
drwxr-xr-x 4 sunbeam sunbeam 4096 Oct  8 00:00 Documents  
drwxr-xr-x 2 sunbeam sunbeam 20480 Oct  7 22:07 Pictures  
drwxr-xr-x 2 sunbeam sunbeam 4096 Aug 17 03:07 Music
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ ls -ls  
total 16  
drwxrwxr-x 2 sunbeam sunbeam 4096 Oct  8 17:16 linux  
drwxrwxr-x 2 sunbeam sunbeam 4096 Oct  8 18:26 text.txt  
-rw-rw-r-- 1 sunbeam sunbeam   81 Oct  8 18:07 file.txt  
-rw-rw-r-- 1 sunbeam sunbeam   33 Oct  8 18:39 number.txt  
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ ls -lSr  
total 16  
-rw-rw-r-- 1 sunbeam sunbeam   33 Oct  8 18:39 number.txt  
-rw-rw-r-- 1 sunbeam sunbeam   81 Oct  8 18:07 file.txt  
drwxrwxr-x 2 sunbeam sunbeam 4096 Oct  8 18:26 text.txt  
drwxrwxr-x 2 sunbeam sunbeam 4096 Oct  8 17:16 linux  
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ █
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ ls -i  
1315725 file.txt 1315721 linux 1315722 number.txt 1315582 text.txt  
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ █
```

4. List the contents of the subdirectory.

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/note$ cd ../../
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~$ cd os
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ ls
file.txt  linux  note  number.txt  text.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ ls note
image
```

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.

```
file.txt  linux  note  number.txt  text.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ cat > details.txt
Chakrod Akshita
^C
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ cat >> details.txt
Dharmabad
^C
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ cat details.txt
Chakrod Akshita
Dharmabad
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ █
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ touch -t 202110310845 file.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ ls -lt
total 24
-rw-rw-r-- 1 sunbeam sunbeam   26 Oct  8 20:15 details.txt
drwxrwxr-x 3 sunbeam sunbeam 4096 Oct  8 19:58 note
-rw-rw-r-- 1 sunbeam sunbeam   33 Oct  8 18:39 number.txt
drwxrwxr-x 2 sunbeam sunbeam 4096 Oct  8 18:26 text.txt
drwxrwxr-x 2 sunbeam sunbeam 4096 Oct  8 17:16 linux
-rw-rw-r-- 1 sunbeam sunbeam  81 Oct 31 2021 file.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os$ █
```

7. Create directory structure : Give following commands ,

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment$ rmdir one
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment$ ls
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment$ mkdir one
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment$ cd one
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one$ touch 1.txt 11.txt 111.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one$ mkdir two
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two$ cd two
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two$ touch 2.txt 22.txt 222.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two$ mkdir three
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three$ cd three
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three$ touch 3.txt 33.txt 333.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three$ mkdir four
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three$ cd four
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three/four$ touch 4.txt 44.txt 444.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three/four$ mkdir five
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three/four$ cd five
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three/five$ touch 5.txt 55.txt 555.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three/five$ cd ~
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~$ █
```

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment$ find . -type d
.
./one
./one/two
./one/two/three
./one/two/three/four
./one/two/three/four/five
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment$ find . -type f
./one/11.txt
./one/1.txt
./one/two/2.txt
./one/two/22.txt
./one/two/three/33.txt
./one/two/three/four/five/55.txt
./one/two/three/four/five/555.txt
./one/two/three/four/five/5.txt
./one/two/three/four/4.txt
./one/two/three/four/44.txt
./one/two/three/3.txt
./one/two/three/333.txt
./one/two/222.txt
./one/111.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment$ █
```

8. Considering above directory structure , Do following operations :

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

```
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment$ ls one/two/three/four/five  
555.txt 55.txt 5.txt
```

```
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment$ █
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment$ echo "Akshita" > one/two/three/four/44.txt  
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment$ cat one/two/three/four/44.txt  
Akshita
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment$ rm one/two/three/four/five/555.txt  
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment$ ls one/two/three/four/five  
55.txt 5.txt
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment$ cd one/two/three/four/five  
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment/one/two/three/four/five$ █
```

- 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-HP-Laptop-15-bslxx:~/os/Assignment/one/two/three/four/five$ cd ../../..  
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment/one/two/three$ cat 3.txt  
PG-DAC  
sunbeam@sunbeam-HP-Laptop-15-bslxx:~/os/Assignment/one/two/three$ █
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three/four/five$ cd ../../
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three$ cat 3.txt
PG-DAC
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three$ 
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment$ cd one/two/three/four/five
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three/four/five$ cd ../../..
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two$ rm 222.txt
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two$ ls
22.txt 2.txt  three
```

viii. now change the directory to "one"

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two$ cd ..
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one$ 
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one$ rm two/three/four/five/*
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one$ rmdir two/three/four/five
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one$ 
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one$ rm -r two/three/four
```

xii. change to your home directory.

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one$ cd ~  
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~$ █
```

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

```
sunbeam@sunbeam-HP-Laptop-15-bs1xx:~/os/Assignment/one/two/three$ touch -t 202210090245 3.txt
```