

## Assignmnet No: 2

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

```
karan@D2-KARAN-92917:~$ ls -lt
total 1216
drwxrwxr-x 6 karan karan 4096 Oct 25 16:26 CDAC
drwxr-xr-x 2 karan karan 4096 Oct 25 16:15 Downloads
-rw-rw-r-- 1 karan karan 1196352 Oct 25 16:04 Assignment_1.odt
drwx----- 5 karan karan 4096 Oct 25 15:12 snap
drwxr-xr-x 3 karan karan 4096 Oct 24 21:47 Desktop
drwxr-xr-x 3 karan karan 4096 Oct 24 21:26 Pictures
-rw-r--r-- 1 karan karan 243 Oct 2 22:57 authenticator.txt
drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Documents
drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Music
drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Public
drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Templates
drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Videos
karan@D2-KARAN-92917:~$
```

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

```
karan@D2-KARAN-92917:~$ ls -ls
total 1216
1172 -rw-rw-r-- 1 karan karan 1196352 Oct 25 16:04 Assignment_1.odt
  4 -rw-r--r-- 1 karan karan 243 Oct 2 22:57 authenticator.txt
  4 drwxrwxr-x 6 karan karan 4096 Oct 25 16:26 CDAC
  4 drwxr-xr-x 3 karan karan 4096 Oct 24 21:47 Desktop
  4 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Documents
  4 drwxr-xr-x 2 karan karan 4096 Oct 25 16:15 Downloads
  4 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Music
  4 drwxr-xr-x 3 karan karan 4096 Oct 24 21:26 Pictures
  4 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Public
  4 drwx----- 5 karan karan 4096 Oct 25 15:12 snap
  4 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Templates
  4 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Videos
karan@D2-KARAN-92917:~$
```

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

```
karan@D2-KARAN-92917:~$ ls -li
total 1216
1711204 -rw-rw-r-- 1 karan karan 1196352 Oct 25 16:04 Assignment_1.odt
1572874 -rw-r--r-- 1 karan karan 243 Oct 2 22:57 authenticator.txt
1704836 drwxrwxr-x 6 karan karan 4096 Oct 25 16:26 CDAC
1704020 drwxr-xr-x 3 karan karan 4096 Oct 24 21:47 Desktop
1704024 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Documents
1704021 drwxr-xr-x 2 karan karan 4096 Oct 25 16:15 Downloads
1704025 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Music
1704026 drwxr-xr-x 3 karan karan 4096 Oct 24 21:26 Pictures
1704023 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Public
1703938 drwx----- 5 karan karan 4096 Oct 25 15:12 snap
1704022 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Templates
1704027 drwxr-xr-x 2 karan karan 4096 Oct 2 01:13 Videos
karan@D2-KARAN-92917:~$
```

4. List the contents of the subdirectory.

```

karan@D2-KARAN-92917:~$ ls -R
.:
Assignment_1.odt  CDAC  Documents  Music  Public  Templates  xyz.txt
authenticator.txt Desktop Downloads Pictures snap Videos

./CDAC:
Day-1  Day-2  demo1  sdm  SDM

./CDAC/Day-1:
Assign  Assignments  Day-1

./CDAC/Day-1/Assign:
Assignment1.odt

./CDAC/Day-1/Assignments:
1_Linux_Command_assignment_I.pdf  2_Linux_commands_assignment_II.pdf

./CDAC/Day-1/Day-1:
class_work.pdf  commads-1.pdf  Day-1_DAC.pdf  history.txt

./CDAC/Day-2:
class_work.pdf  command_2.pdf  Day-1_DAC.pdf  History_Day-2.txt
commads-1.pdf  command_3.pdf  History_Day-2_Cleaned.txt

./CDAC/demo1:
demo2

./CDAC/demo1/demo2:

./CDAC/sdm:
Assignments  Day-1  Day-2

./CDAC/sdm/Assignments:
1_Linux_Command_assignment_I.pdf  5_Linux_Commands_assignment_V.pdf
2_Linux_commands_assignment_II.pdf  6_Linux_assignment_VI.pdf
3_Linux_Commands_assignment_III.pdf  7_Linux_Shell_Script_Assignments.pdf
4_Linux_Commands_assignment_IV.pdf

./CDAC/sdm/Day-1:
class_work.pdf  commads-1.pdf  Day-1_DAC.pdf  history.txt

./CDAC/sdm/Day-2:
class_work.pdf  command_2.pdf  Day-1_DAC.pdf  History_Day-2.txt
commads-1.pdf  command_3.pdf  History_Day-2_Cleaned.txt

./CDAC/SDM:
Assignment_1  Assignment_2

./CDAC/SDM/Assignment_1:
Assignment_1.pdf

./CDAC/SDM/Assignment_2:

```

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

```

karan@D2-KARAN-92917:~$ cat > name.txt
Patil Karan
karan@D2-KARAN-92917:~$ cat name.txt
Patil Karan
karan@D2-KARAN-92917:~$

```

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

```

karan@D2-KARAN-92917:~$ cat >> name.txt
Address: Rajopadhye Nagar , Kolhapur
karan@D2-KARAN-92917:~$

```

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

```

karan@D2-KARAN-92917:~$ cat name.txt
Patil Karan
Address: Rajopadhye Nagar , Kolhapur
karan@D2-KARAN-92917:~$

```

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

```
karan@D2-KARAN-92917:~$ stat name.txt
  File: name.txt
  Size: 48          Blocks: 8          IO Block: 4096   regular file
Device: 1030ah/66314d Inode: 1572875   Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/   karan)   Gid: ( 1000/   karan)
Access: 2025-10-25 17:46:04.829332113 +0530
Modify: 2025-10-25 17:45:25.684248117 +0530
Change: 2025-10-25 17:45:25.684248117 +0530
 Birth: 2025-10-25 17:44:17.660873936 +0530
karan@D2-KARAN-92917:~$ touch name.txt
karan@D2-KARAN-92917:~$ stat name.txt
  File: name.txt
  Size: 48          Blocks: 8          IO Block: 4096   regular file
Device: 1030ah/66314d Inode: 1572875   Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/   karan)   Gid: ( 1000/   karan)
Access: 2025-10-25 17:47:36.467145421 +0530
Modify: 2025-10-25 17:47:36.467145421 +0530
Change: 2025-10-25 17:47:36.467145421 +0530
 Birth: 2025-10-25 17:44:17.660873936 +0530
karan@D2-KARAN-92917:~$
```

```
karan@D2-KARAN-92917:~$ touch -t 200001011212.00 name.txt
karan@D2-KARAN-92917:~$ stat name.txt
  File: name.txt
  Size: 48          Blocks: 8          IO Block: 4096   regular file
Device: 1030ah/66314d Inode: 1572875   Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/   karan)   Gid: ( 1000/   karan)
Access: 2000-01-01 12:12:00.000000000 +0530
Modify: 2000-01-01 12:12:00.000000000 +0530
Change: 2025-10-25 17:50:57.363080990 +0530
 Birth: 2025-10-25 17:44:17.660873936 +0530
karan@D2-KARAN-92917:~$
```

7. Create directory structure : Give following commands ,

```
karan@D2-KARAN-92917:~$ cd CDAC
karan@D2-KARAN-92917:~/CDAC$ mkdir one
karan@D2-KARAN-92917:~/CDAC$ cd one
karan@D2-KARAN-92917:~/CDAC/one$ touch 1.txt 11.txt 111.txt
karan@D2-KARAN-92917:~/CDAC/one$ mkdir two
karan@D2-KARAN-92917:~/CDAC/one$ cd two
karan@D2-KARAN-92917:~/CDAC/one/two$ touch 2.txt 22.txt 222.txt
karan@D2-KARAN-92917:~/CDAC/one/two$ mkdir three
karan@D2-KARAN-92917:~/CDAC/one/two$ cd three
karan@D2-KARAN-92917:~/CDAC/one/two/three$ touch 3.txt 33.txt 333.txt
karan@D2-KARAN-92917:~/CDAC/one/two/three$ mkdir four
karan@D2-KARAN-92917:~/CDAC/one/two/three$ cd four
karan@D2-KARAN-92917:~/CDAC/one/two/three/four$ touch 4.txt
karan@D2-KARAN-92917:~/CDAC/one/two/three/four$ touch 44.txt 444.txt
karan@D2-KARAN-92917:~/CDAC/one/two/three/four$ mkdir five
karan@D2-KARAN-92917:~/CDAC/one/two/three/four$ cd five
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$ touch 5.txt 55.txt 555.txt
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$ cd ~
karan@D2-KARAN-92917:~$
```

8. Considering above directory structure , Do following operations :

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

```
karan@D2-KARAN-92917:~$ ls ~/ CDAC/one/two/three/four/five
CDAC/one/two/three/four/five:
555.txt 55.txt 5.txt
```

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

```
karan@D2-KARAN-92917:~$ cat > CDAC/one/two/three/four/44.txt
Karan Ramchandra Patil
karan@D2-KARAN-92917:~$ cat CDAC/one/two/three/four/44.txt
Karan Ramchandra Patil
karan@D2-KARAN-92917:~$
```

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

```
karan@D2-KARAN-92917:~$ rm CDAC/one/two/three/four/five/555.txt
karan@D2-KARAN-92917:~$ ls CDAC/one/two/three/four/five
55.txt  5.txt
karan@D2-KARAN-92917:~$
```

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

```
karan@D2-KARAN-92917:~$ cd CDAC/one/two/three/four/five/
karan@D2-KARAN-92917:~/CDAC/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.

```
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$ cat > CDAC/one/two/three/3.txt
DAC
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$ cat CDAC/one/two/three/3.txt
DAC
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$
```

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

```
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$ ls CDAC/one/two
222.txt 22.txt 2.txt three
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$
```

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

```
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$ rm CDAC/one/two/222.txt
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$ ls CDAC/one/two
22.txt 2.txt three
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$
```

viii. now change the directory to "one"

```
karan@D2-KARAN-92917:~/CDAC/one/two/three/four/five$ cd CDAC/one
karan@D2-KARAN-92917:~/CDAC/one$
```

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

```
karan@D2-KARAN-92917:~/CDAC/one$ rm -r two/three/four/five
karan@D2-KARAN-92917:~/CDAC/one$ ls two/three/four/five
ls: cannot access 'two/three/four/five': No such file or directory
karan@D2-KARAN-92917:~/CDAC/one$ ls two/three/four
444.txt 44.txt 4.txt
karan@D2-KARAN-92917:~/CDAC/one$
```

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

```
karan@D2-KARAN-92917:~/CDAC/one$ rm -r two/three/four/five
karan@D2-KARAN-92917:~/CDAC/one$ ls two/three/four/five
ls: cannot access 'two/three/four/five': No such file or directory
karan@D2-KARAN-92917:~/CDAC/one$ ls two/three/four
444.txt 44.txt 4.txt
karan@D2-KARAN-92917:~/CDAC/one$
```

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

```
karan@D2-KARAN-92917:~/CDAC/one$ rm -r two/three/four/
karan@D2-KARAN-92917:~/CDAC/one$ ls -r two/three/four
ls: cannot access 'two/three/four': No such file or directory
karan@D2-KARAN-92917:~/CDAC/one$ ls -r two/three
3.txt 33.txt 333.txt
karan@D2-KARAN-92917:~/CDAC/one$
```



xii. change to your home directory.

```
karan@D2-KARAN-92917:~/CDAC/one$ cd ~
karan@D2-KARAN-92917:~$ ls
Assignment_1.odt  CDAC  Documents  Music  Pictures  snap  Videos
authenticator.txt Desktop Downloads name.txt Public  Templates xyz.txt
karan@D2-KARAN-92917:~$
```

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

```
karan@D2-KARAN-92917:~$ stat CDAC/one/two/three/3.txt
  File: CDAC/one/two/three/3.txt
  Size: 4          Blocks: 8          IO Block: 4096   regular file
Device: 1030ah/66314d Inode: 1714708    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/   karan)   Gid: ( 1000/   karan)
Access: 2025-10-25 18:03:24.760804135 +0530
Modify: 2025-10-25 18:03:17.071881618 +0530
Change: 2025-10-25 18:03:17.071881618 +0530
 Birth: 2025-10-25 17:53:24.820253085 +0530
karan@D2-KARAN-92917:~$ touch -t 200001011212.00 CDAC/one/two/three/3.txt
karan@D2-KARAN-92917:~$ stat CDAC/one/two/three/3.txt
  File: CDAC/one/two/three/3.txt
  Size: 4          Blocks: 8          IO Block: 4096   regular file
Device: 1030ah/66314d Inode: 1714708    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/   karan)   Gid: ( 1000/   karan)
Access: 2000-01-01 12:12:00.000000000 +0530
Modify: 2000-01-01 12:12:00.000000000 +0530
Change: 2025-10-25 18:14:13.123131649 +0530
 Birth: 2025-10-25 17:53:24.820253085 +0530
karan@D2-KARAN-92917:~$
```