

Linux Commands Assignments - II

1. List the directory contents date wise sorted.

```
osboxes@osboxes:~$ ls -lt
total 60
-rw-rw-r-- 1 osboxes osboxes  46 Oct  8 13:48 numbers.txt
-rw-rw-r-- 1 osboxes osboxes   0 Oct  8 13:47 file.txt
drwxrwxr-x 3 osboxes osboxes 4096 Oct  8 13:42 d1
drwxrwxr-x 2 osboxes osboxes 4096 Oct  8 13:42 dir3
drwxrwxr-x 2 osboxes osboxes 4096 Oct  8 13:42 dir4
drwxrwxr-x 2 osboxes osboxes 4096 Oct  8 13:41 dir1
-rw-rw-r-- 1 osboxes osboxes  83 Oct  8 13:39 catfile.txt
drwxr-xr-x 2 osboxes osboxes 4096 Apr 22  2022 Videos
drwxr-xr-x 2 osboxes osboxes 4096 Apr 22  2022 Desktop
drwxr-xr-x 2 osboxes osboxes 4096 Apr 22  2022 Documents
drwxr-xr-x 2 osboxes osboxes 4096 Apr 22  2022 Downloads
drwxr-xr-x 2 osboxes osboxes 4096 Apr 22  2022 Music
drwxr-xr-x 2 osboxes osboxes 4096 Apr 22  2022 Pictures
drwxr-xr-x 2 osboxes osboxes 4096 Apr 22  2022 Public
drwxr-xr-x 2 osboxes osboxes 4096 Apr 22  2022 Templates
drwx----- 3 osboxes osboxes 4096 Apr 22  2022 snap
```

2. List the directory contents size wise sorted.

```
osboxes@osboxes:~$ ls -ls
total 108
 4 -rw-rw-r-- 1 osboxes osboxes  83 Oct  8 23:09 catfile.txt
 4 drwxrwxr-x 3 osboxes osboxes 4096 Oct  8 23:12 d1
 4 drwxr-xr-x 2 osboxes osboxes 4096 Apr 23  2022 Desktop
 4 drwxrwxr-x 2 osboxes osboxes 4096 Oct  8 23:11 dir1
 4 drwxrwxr-x 2 osboxes osboxes 4096 Oct  8 23:12 dir3
 4 drwxrwxr-x 2 osboxes osboxes 4096 Oct  8 23:12 dir4
 4 drwxr-xr-x 2 osboxes osboxes 4096 Apr 23  2022 Documents
 4 drwxr-xr-x 2 osboxes osboxes 4096 Apr 23  2022 Downloads
 4 -rw-rw-r-- 1 osboxes osboxes  30 Oct  9 16:12 error.txt
 0 -rw-rw-r-- 1 osboxes osboxes   0 May 12 05:25 file.txt
 4 -rw-rw-r-- 1 osboxes osboxes  10 Oct  9 16:12 input1.txt
 4 drwxr-xr-x 2 osboxes osboxes 4096 Apr 23  2022 Music
 4 -rw-rw-r-- 1 osboxes osboxes  46 Oct  8 23:18 numbers.txt
 4 drwxrwxr-x 3 osboxes osboxes 4096 Oct  9 15:38 one
 4 -rw-rw-r-- 1 osboxes osboxes   3 Oct  9 16:12 output.txt
 4 drwxr-xr-x 2 osboxes osboxes 4096 Apr 23  2022 Pictures
 4 drwxr-xr-x 2 osboxes osboxes 4096 Apr 23  2022 Public
 4 -rw-rw-r-- 1 osboxes osboxes  34 Oct  9 18:25 :q
 4 -rw-rw-r-- 1 osboxes osboxes  52 Oct  9 17:33 repeat.txt
 4 drwxrwxr-x 2 osboxes osboxes 4096 Oct  9 19:22 script
 4 -rw-rw-r-- 1 osboxes osboxes  27 Oct  9 17:23 select.txt
 4 -rw-rw-r-- 1 osboxes osboxes  49 Oct  9 15:20 selfinfo.txt
 4 -rw-rw-r-- 1 osboxes osboxes 188 Oct  9 18:56 shriya.txt
 4 drwx----- 3 osboxes osboxes 4096 Apr 23  2022 snap
```

3. List directory contents along with their inode no.

```
osboxes@osboxes:~$ ls -li
15204981 catfile.txt 15204991 dir4 15205042 input1.txt 15204420 Pictures 15205053 select.txt 15204416 Templates
15204992 d1 15204418 Documents 15204419 Music 15204417 Public 15204822 selfinfo.txt 15204421 Videos
15204414 Desktop 15204415 Downloads 15204988 numbers.txt 15205055 :q 15205052 shriya.txt 15204741 vin.txt
15204984 dir1 15205043 error.txt 15205022 one 15205050 repeat.txt 15204357 snap
15204990 dir3 15204945 file.txt 15204688 output.txt 15204692 script 15205021 taste.txt
```

4. List the contents of the subdirectory.

```
osboxes@osboxes:~$ ls -R
.:
catfile.txt  dir1  Documents  file.txt  numbers.txt  Pictures  repeat.txt  selfinfo.txt  taste.txt  vin.txt
d1           dir3  Downloads  input1.txt one          Public    script      shriya.txt  Templates
Desktop      dir4  error.txt  Music     output.txt  :q       select.txt  snap        Videos

./d1:
82

./d1/d2:
83

./d1/d2/d3:
84

./d1/d2/d3/d4:

./Desktop:

./d1r1:

./d1r3:

./d1r4:

./Documents:

./Downloads:

./Music:
```

```
./one/two:
222.txt 22.txt 2.txt three

./one/two/three:
333.txt 33.txt 3.txt four

./one/two/three/four:
444.txt 44.txt 4.txt five

./one/two/three/four/five:
555.txt 55.txt 5.txt

./Pictures:

./Public:

./script:
script01.sh shriya.txt

./snap:
snapd-desktop-integration

./snap/snapd-desktop-integration:
10 common current

./snap/snapd-desktop-integration/10:
Desktop Documents Downloads Music Pictures Public Templates Videos
```

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.

```
osboxes@osboxes:~$ cat > intro.txt
Name : Shriya
Surname : Patil
osboxes@osboxes:~$ cat >> intro.txt
Address : Ichalkaranji
osboxes@osboxes:~$ cat intro.txt
Name : Shriya
Surname : Patil
Address : Ichalkaranji
```

6. how to change the time stamp of file

```
osboxes@osboxes:~$ touch -t 202405120350.30 select.txt
```

```
osboxes@osboxes:~$ ls -lt
total 112
-rw-rw-r-- 1 osboxes osboxes 53 Oct 9 22:28 intro.txt
drwxrwxr-x 2 osboxes osboxes 4096 Oct 9 19:22 script
-rw-rw-r-- 1 osboxes osboxes 188 Oct 9 18:56 shriya.txt
-rw-rw-r-- 1 osboxes osboxes 34 Oct 9 18:27 vim.txt
-rw-rw-r-- 1 osboxes osboxes 34 Oct 9 18:25 :q
-rw-rw-r-- 1 osboxes osboxes 52 Oct 9 17:33 repeat.txt
-rw-rw-r-- 1 osboxes osboxes 55 Oct 9 16:24 taste.txt
-rw-rw-r-- 1 osboxes osboxes 30 Oct 9 16:12 error.txt
-rw-rw-r-- 1 osboxes osboxes 3 Oct 9 16:12 output.txt
-rw-rw-r-- 1 osboxes osboxes 10 Oct 9 16:12 input1.txt
drwxrwxr-x 3 osboxes osboxes 4096 Oct 9 15:38 one
-rw-rw-r-- 1 osboxes osboxes 49 Oct 9 15:20 selfinfo.txt
-rw-rw-r-- 1 osboxes osboxes 46 Oct 8 23:18 numbers.txt
drwxrwxr-x 3 osboxes osboxes 4096 Oct 8 23:12 d1
drwxrwxr-x 2 osboxes osboxes 4096 Oct 8 23:12 dir3
drwxrwxr-x 2 osboxes osboxes 4096 Oct 8 23:12 dir4
drwxrwxr-x 2 osboxes osboxes 4096 Oct 8 23:11 dir1
-rw-rw-r-- 1 osboxes osboxes 83 Oct 8 23:09 catfile.txt
-rw-rw-r-- 1 osboxes osboxes 0 May 12 05:25 file.txt
-rw-rw-r-- 1 osboxes osboxes 27 May 12 03:50 select.txt
drwxr-xr-x 2 osboxes osboxes 4096 Apr 23 2022 Videos
drwxr-xr-x 2 osboxes osboxes 4096 Apr 23 2022 Desktop
drwxr-xr-x 2 osboxes osboxes 4096 Apr 23 2022 Documents
drwxr-xr-x 2 osboxes osboxes 4096 Apr 23 2022 Downloads
drwxr-xr-x 2 osboxes osboxes 4096 Apr 23 2022 Music
drwxr-xr-x 2 osboxes osboxes 4096 Apr 23 2022 Pictures
drwxr-xr-x 2 osboxes osboxes 4096 Apr 23 2022 Public
drwxr-xr-x 2 osboxes osboxes 4096 Apr 23 2022 Templates
drwx----- 3 osboxes osboxes 4096 Apr 23 2022 snap
```

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 ~
```

```

osboxes@osboxes:~$ mkdir one
osboxes@osboxes:~$ cd one
osboxes@osboxes:~/one$ touch 1.txt 11.txt 111.txt
osboxes@osboxes:~/one$ mkdir two
osboxes@osboxes:~/one$ cd two
osboxes@osboxes:~/one/two$ touch 2.txt 22.txt 222.txt
osboxes@osboxes:~/one/two$ mkdir three
osboxes@osboxes:~/one/two$ cd three
osboxes@osboxes:~/one/two/three$ touch 3.txt 33.txt 333.txt
osboxes@osboxes:~/one/two/three$ mkdir four
osboxes@osboxes:~/one/two/three$ cd four
osboxes@osboxes:~/one/two/three/four$ touch 4.txt 44.txt 444.txt
osboxes@osboxes:~/one/two/three/four$ mkdir five
osboxes@osboxes:~/one/two/three/four$ cd five
osboxes@osboxes:~/one/two/three/four/five$ touch 5.txt 55.txt 555.txt
osboxes@osboxes:~/one/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).

```

osboxes@osboxes:~$ ls 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.

```

osboxes@osboxes:~$ cat > one/two/three/four/44.txt
Shriya
osboxes@osboxes:~$ cat one/two/three/four/44.txt
Shriya

```

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

```

osboxes@osboxes:~$ rm one/two/three/four/five/555.txt
osboxes@osboxes:~$ ls one/two/three/four/five
55.txt  5.txt

```

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

```

osboxes@osboxes:~$ cd one/two/three/four/five
osboxes@osboxes:~/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.

```
osboxes@osboxes:~$ cat > one/two/three/3.txt
PG-DAC
osboxes@osboxes:~$ cat one/two/three/3.txt
PG-DAC
```

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

```
osboxes@osboxes:~$ ls one/two
222.txt 22.txt 2.txt three
```

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

```
osboxes@osboxes:~$ rm one/two/222.txt
```

```
osboxes@osboxes:~$ ls one/two/
22.txt 2.txt three
```

viii. now change the directory to "one"

```
osboxes@osboxes:~/one/two/three/four/five$ cd ../../../../
osboxes@osboxes:~/one$
```

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

```
osboxes@osboxes:~/one$ rm two/three/four/five/*
osboxes@osboxes:~/one$
```

x. remove directory named "five" from current directory

```
osboxes@osboxes:~/one$ rmdir two/three/four/five
```

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

```
osboxes@osboxes:~/one$ rm -rvf two/three/four
removed 'two/three/four/4.txt'
removed 'two/three/four/44.txt'
removed 'two/three/four/444.txt'
removed directory 'two/three/four'
```

xii. change to your home directory.

```
osboxes@osboxes:~/one$ cd ~
```

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

```
osboxes@osboxes:~/one/two/three$ ls -l
total 4
-rw-rw-r-- 1 osboxes osboxes 0 Oct  9 22:43 333.txt
-rw-rw-r-- 1 osboxes osboxes 0 Oct  9 22:43 33.txt
-rw-rw-r-- 1 osboxes osboxes 7 Oct  9 22:59 3.txt
osboxes@osboxes:~/one/two/three$ touch -h 3.txt
osboxes@osboxes:~/one/two/three$ ls -l
total 4
-rw-rw-r-- 1 osboxes osboxes 0 Oct  9 22:43 333.txt
-rw-rw-r-- 1 osboxes osboxes 0 Oct  9 22:43 33.txt
-rw-rw-r-- 1 osboxes osboxes 7 Oct  9 23:29 3.txt
osboxes@osboxes:~/one/two/three$
```