Linux Commands Assignments - II

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

```
osboxes@osboxes:~$ ls -lt
total 68
drwxrwxr-x 2 osboxes osboxes 4096 Oct 9 05:50 d.txt
-rw-rw-r-- 1 osboxes osboxes 0 Oct 9 05:45 output.txt
-rw-rw-r-- 1 osboxes osboxes
                                        5 Oct 9 05:43 input.txt
drwxr-xr-x 2 osboxes osboxes 4096 Oct 9 05:17 Downloads
drwx----- 7 osboxes osboxes 4096 Oct 8 08:57 snap
drwxrwxr-x 3 osboxes osboxes 4096 Oct 8 08:31 dir2
-rw-rw-r-- 1 osboxes osboxes 104 Oct 8 08:25 moved.txt
-rw-rw-r-- 1 osboxes osboxes 104 Oct 8 08:23 catfile.txt
                                        0 Oct 8 08:20 file3.txt
-rw-rw-r-- 1 osboxes osboxes
-rw-rw-r-- 1 osboxes osboxes
                                        0 Oct 8 08:19 fle.txt
drwxrwxr-x 3 osboxes osboxes 4096 Oct 8 08:16 ₫
drwxrwxr-x 2 osboxes osboxes 4096 Oct 8 08:13 dir3
-rw-rw-r-- 1 osboxes osboxes
                                      76 Oct 7 09:12 fi.txt
                                        0 Oct 7 09:10 cat
-rw-rw-r-- 1 osboxes osboxes
                                                3 20:20 Desktop
drwxr-xr-x 2 osboxes osboxes 4096 Jun
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Documents
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Documents
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Pictures
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Public
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Templates
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Videos
osboxes@osboxes:~$
```

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

```
osboxes@osboxes:~$ ls -lS
total 68
drwxrwxr-x 3 osboxes osboxes 4096 Oct 8 08:16 💶
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Desktop
drwxrwxr-x 3 osboxes osboxes 4096 Oct 8 08:31 dir2
drwxrwxr-x 2 osboxes osboxes 4096 Oct 8 08:13 dir3
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Documents drwxr-xr-x 2 osboxes osboxes 4096 Oct 9 05:17 Downloads
drwxrwxr-x 2 osboxes osboxes 4096 Oct 9 05:50 d.txt
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Music
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Pictures
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Public
drwx----- 7 osboxes osboxes 4096 Oct 8 08:57 snap
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Templates
drwxr-xr-x 2 osboxes osboxes 4096 Jun 3 20:20 Videos
-rw-rw-r-- 1 osboxes osboxes 104 Oct 8 08:23 catfile.txt
-rw-rw-r-- 1 osboxes osboxes 104 Oct 8 08:25 moved.txt
-rw-rw-r-- 1 osboxes osboxes 76 Oct 7 09:12 fi.txt
                                5 Oct 9 05:43 input.txt
0 Oct 7 09:10 cat
-rw-rw-r-- 1 osboxes osboxes
-rw-rw-r-- 1 osboxes osboxes
-rw-rw-r-- 1 osboxes osboxes 0 Oct 8 08:20 file3.txt
                                 0 Oct 8 08:19 fle.txt
-rw-rw-r-- 1 osboxes osboxes
                               0 Oct 9 05:45 output.txt
-rw-rw-r-- 1 osboxes osboxes
osboxes@osboxes:-$
```

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

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```
osboxes@osboxes:~$ ls -i
8127262 cat
                   8126545 Documents 8130728 input.txt
                                                        8126470 snap
8128176 catfile.txt 8126542 Downloads 8128173 moved.txt
                                                        8126543 Templates
8127162 1
                   8127852 d.txt 8126546 Music
                                                        8126548 Videos
8126541 Desktop
                   8128175 file3.txt 8130743 output.txt
8128165 dir2
                   8127269 fi.txt 8126547 Pictures
                   8128167 fle.txt 8126544 Public
8128166 dir3
osboxes@osboxes:-$
```

4. List the contents of the subdirectory.

Ans –

```
osboxes@osboxes:~$ ls -R /home/osboxes/dir2
/home/osboxes/dir2:
file2.txt move
/home/osboxes/dir2/move:
copy.txt
osboxes@osboxes:~$
```

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. Ans -

```
osboxes@osboxes:~$ cat > name.txt
Name: Aman Khare
osboxes@osboxes:~$ > name.txt
osboxes@osboxes:~$ cat > name.txt
Name: Aman
Surname: Khare
osboxes@osboxes:~$ cat name.txt
Name: Aman
Surname: Khare
osboxes@osboxes:~$ cat >> name.txt
Address: Jhansi
osboxes@osboxes:~$
osboxes@osboxes:~$ cat name.txt
Name: Aman
Surname: Khare
Address: Jhansi
```

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

```
osboxes@osboxes:-$ touch -t 202306081230 cat
osboxes@osboxes:-$ ls cat
```

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

Ans –

-> cd five

-> touch 5.txt 55.txt 555.txt

-> cd ~ (i.e. go to your home directory)

```
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 ~
osboxes@osboxes:-$
```

- 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
osboxes@osboxes:~$
```

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

```
osboxes@osboxes:-$ echo "Name : Yash Gupta" >./one/two/three/four/44.txt
osboxes@osboxes:-$ cd one/two/three/four
osboxes@osboxes:-/one/two/three/four$ cat 44.txt
Name : Yash Gupta
osboxes@osboxes:-/one/two/three/four$
```

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
osboxes@osboxes:~$
```

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:~/one/two/three/four/five$ cat > ../../3.txt
Course : CDAC
^C
osboxes@osboxes:~/one/two/three/four/five$ cat ../../3.txt
Course : CDAC
osboxes@osboxes:~/one/two/three/four/five$
```

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

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

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

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

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/*.txt
osboxes@osboxes:~/one$ ls ./two/three/four/five
```

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

```
osboxes@osboxes:~/one$ rmdir ./two/three/four/five
osboxes@osboxes:~/one$ ls ./two/three/four
444.txt 44.txt 4.txt
osboxes@osboxes:~/one$
```

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

```
osboxes@osboxes:~/one$ rm -R ./two/three/four
osboxes@osboxes:~/one$ ls ./two/three
333.txt 33.txt 3.txt
osboxes@osboxes:~/one$
```

xii. change to your home directory.

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

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

osboxes@osboxes:~\$ touch -t 202312090405 ./one/two/three/3.txt

```
osboxes@osboxes:-$ ls -lt ./one/two/three
total 4
-rw-rw-r-- 1 osboxes osboxes 0 Oct 9 06:49 333.txt
-rw-rw-r-- 1 osboxes osboxes 0 Oct 9 06:49 33.txt
-rw-rw-r-- 1 osboxes osboxes 14 Dec 9 2023 3.txt
osboxes@osboxes:-$
```