Assignment 3

1.ls -a=>Display hidden File

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/copydir1/dir1$ ls
tush.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/copydir1/dir1$ mv
tush.txt .tush.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/copydir1/dir1$ ls
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/copydir1/dir1$ ls
-a
.  ..  .tush.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/copydir1/dir1$
```

2. rename Rename all *.txt files to *.htm

```
's/.html/.txt/'
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/filerename$ rename
 's/\.txt$/\.htm/' *.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/filerename$ ls
111.htm   11.htm   1.htm
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/filerename$
```

3. ln -sCreate symbolic link (shortcut) for a file

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ ln -s tush.txt li
nkfile.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ ls
copydir1     file1.txt     myinfo.txt   out.txt                test.txt
empty1.txt   file2.txt     name.txt     renamedfile1.txt       tush.txt
empty2.txt   filerename    newdir       renamedfiledfile1.txt
empty3.txt   linkfile.txt  num.txt      repeat.txt
empty.txt    lserr.txt     one          script
err.txt      lsout.txt     os           select.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

4. ln Create hard link for a file

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ ls
copydir1     file1.txt     lsout.txt    os                     select.txt
empty1.txt   file2.txt     myinfo.txt   out.txt                test.txt
empty2.txt   filerename    name.txt     renamedfile1.txt       tush.txt
empty3.txt   hardlink.txt  newdir       renamedfiledfile1.txt
empty.txt    linkfile.txt  num.txt      repeat.txt
err.txt      lserr.txt     one          script
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

5. stat Display time stamp of the file

```
stat: cannot statx 'hardlck.txt': No such file or directory
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ stat tush.txt
  File: tush.txt
  Size: 44          Blocks: 8          IO Block: 4096   regular file
Device: 807h/2055d  Inode: 11805346    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/  tushar)   Gid: ( 1000/  tushar)
Access: 2023-12-27 22:00:39.867578514 +0530
Modify: 2023-12-26 16:28:42.842021000 +0530
Change: 2023-12-26 21:50:29.566772897 +0530
 Birth: 2023-12-26 21:50:29.558772806 +0530
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```
21. |who | wc (using pipe) |Count words in output of "who" command

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6.touch Change the time stamp of the file

```
19 12.12.12.000000000 TOJJO    tusn.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ stat tush.txt
  File: tush.txt
  Size: 44            Blocks: 8          IO Block: 4096    regular file
Device: 807h/2055d      Inode: 11805346    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/  tushar)   Gid: ( 1000/  tushar)
Access: 2023-12-19 12:12:12.000000000 +0530
Modify: 2023-12-19 12:12:12.000000000 +0530
Change: 2023-12-27 23:08:40.786922221 +0530
 Birth: 2023-12-26 21:50:29.558772806 +0530
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

7.touch Create empty file

```
111.txt  11.txt  1.txt  two
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/one$ touch motabha
i.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/one$ ls
111.txt  11.txt  1.txt  motabhai.txt  two
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/one$
                    7.touch Create empty me
```

8.tail Print all lines in a file from fifth line onwards

```
ind
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/one$ tail -n +5 ab
c.txt
am
from
pune
mh
ind
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/one$
```

9.init 0, poweroff Shutdown (Only for super-user)
10.init 6, reboot Reboot (Only for super-user)

11.whoami Find current user

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ whoami
tushar
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

12. tty-Find current terminal

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ tty
/dev/pts/0
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

13. who am i-Find current user and terminal

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```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ whoami
tushar
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ tty
/dev/pts/0
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

14.users=Find all users logged into the system

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ users
tushar
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

15.who-Find all users logged in and terminals in use

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ who
tushar    tty2            2023-12-28 10:45 (tty2)
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

16. grep, egrep, fgrep Find a given word/pattern from the file

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ cat greptest.txt
this motabhai
is
is
hey
hey
hello
hello hello

hi
linux
linux
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ grep "linux" grep
test.txt
linux
linux
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

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```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ cat > egreptest.t
xt
Hello world
Hello tushar
Hello from motabhai
Hi
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ egrep Hello egrep
test.txt
Hello world
Hello tushar
Hello from motabhai
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

```
nt, @re you using geeks forgeeks for learning computer science con/cepts.
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ fgrep -i "geeks*f
orgeeks" fgrep.txt
Hi, @re you usin.g geeks*forgeeks for learni\ng computer science con/cepts.
Geeks*forgeeks is best for learni\ng.
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$
```

17.chmod-Make a file as read-only

```
Try 'ls --help' for more information.
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ ls -l
total 4
-rw-rw-r-- 1 tushar tushar 26 Dec 28 14:29 chmodread.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$
```

18.chmod-Make a file as write, read and execute

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ cat > chmod
rwe.txt
hi
i
am motabhaytushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignme^C
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ chmod 777 c
hmodrwe.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ ls -l
total 8
-rw-rw-r-- 1 tushar tushar 26 Dec 28 14:29 chmodread.txt
-rwxrwxrwx 1 tushar tushar 17 Dec 28 14:39 chmodrwe.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$
```

19.wc (using redirection) -Take input from the file, count words and store output to other file

```
Try: sudo apt install <deb name>
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ touch file2
.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ wc < file1.
txt > file2.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ cat file2.t
xt
 2  2 10
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$
```

20-who | wc (using pipe)Count words in output of "who" command

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```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ who | wc fi
le1.txt
 2  2 10 file1.txt
```

21.head, tail (using pipe)Print lines 5 to 10 from the given file

```
ff
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ head -n 10
state.txt | tail -5
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$
```

22.sort , uniq (using pipe)Print the uniq values from the unsorted file

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ sort state.txt | uniq
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
buldhana
Chandigarh
Chhattisgarh
Dispur
ff
Gandhinagar
Goa
Gujarat
Haryana
Himachal Pradesh
Hyderabad
Itanagar
Jammu and Kashmir
kolhapur
nagar
Panaji
Patna
Pune
Raipur
Shimla
solapur
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$
```

23.who, grep (using pipe)Display all users not using tty2, tty3, tty4

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ who | grep -v -E 'tty3|tty4'
tushar   tty2         2023-12-28 10:45 (tty2)
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$
```

24.ls Display all files in ascending order of their file size

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ ls -ltr
total 20
-rw-rw-r-- 1 tushar tushar  26 Dec 28 14:29 chmodread.txt
-rwxrwxrwx 1 tushar tushar  17 Dec 28 14:39 chmodrwe.txt
-rw-rw-r-- 1 tushar tushar  10 Dec 28 14:51 file1.txt
-rw-rw-r-- 1 tushar tushar   9 Dec 28 14:55 file2.txt
-rw-rw-r-- 1 tushar tushar 230 Dec 28 17:32 state.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$
```

25.ls, grep (using pipe)Count number of files and directories from current directory

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```
-rw-rw-r--  1 tushar tushar   9 Dec 28 14:55 file2.txt
-rw-rw-r--  1 tushar tushar 230 Dec 28 17:32 state.txt
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ ls -1 | wc -l
5
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments/chmod$ cd ..
tushar@tushar-HP-Pavilion-Notebook:~/Documents/os_assignments$ cd ..
tushar@tushar-HP-Pavilion-Notebook:~/Documents$ ls -l | grep "^-" -c
7
tushar@tushar-HP-Pavilion-Notebook:~/Documents$ ls -l | grep -c ^d
27
tushar@tushar-HP-Pavilion-Notebook:~/Documents$
```

tr Convert file contents into uppercase , also learn "-s" option of this command

```
27
tushar@tushar-HP-Pavilion-Notebook:~/Documents$ echo "welcome" | tr [:lower:] [:upper:]
WELCOME
```

cut -Split the file contents using delimiter and print required fields

```
tushar@tushar-HP-Pavilion-Notebook:~/Documents$ echo "phoenixNAP is a global IT services provider" | cut -d ' ' -f 2
is
tushar@tushar-HP-Pavilion-Notebook:~/Documents$
```