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Assignment No.3

1)ls(Display hidden files):-

```
sunbeam@sunbeam-HP:~$ ls
a,b,c,d          ass3_15.sh     Assignment2        cprogramming_80136      hello.c              package.json
ass1_1           ass3_16.sh     Assignment3_4_5.zip cprogramming_80136.zip hs_err_pid6793.log   package-lock.json
ass3_0015.sh     ass3_17.sh     Assignment6        demo2.sh                Intro                PGDAC
ass3_015.sh      ass3_1.sh      Assignment7        Desktop                 java_practicde       Photos
ass3_04.sh       ass3_2.sh      'Assignments 1-5dbt' Documents             LabExam              Pictures
ass3_06.sh       ass3_3.sh      AssignmentSQL      Downloads               Music                prn
ass3_07.sh       ass3_4.sh      AssSQL             Dsa                     mygitdata            Public
ass3_09.sh       ass3_5.sh      bookdetails        DSA_230940820041        Name.txt             Question2
```

2)rename(Rename all *.txt files to *.htm):-

```
sunbeam@sunbeam-HP:~/one$ rename 's/\.txt$/.htm/' *.txt
sunbeam@sunbeam-HP:~/one$ ls
111.htm  11.htm  1.htm  two
sunbeam@sunbeam-HP:~/one$
```

3)ln -s(Create symbolic link (shortcut) for a file):-
4)ln(Create hard link for a file):-

```
sunbeam@sunbeam-HP:~/OS$ ln -s ~/File.txt ~/link_to_File.txt
sunbeam@sunbeam-HP:~/OS$ ls
File.txt
sunbeam@sunbeam-HP:~/OS$ ln
ln: missing file operand
Try 'ln --help' for more information.
sunbeam@sunbeam-HP:~/OS$ ln File.txt hard_link
sunbeam@sunbeam-HP:~/OS$ ls
File.txt  hard_link
```

5)stat(Display time stamp of the file):-

```
sunbeam@sunbeam-HP:~$ stat copy.txt
  File: copy.txt
  Size: 79             Blocks: 8          IO Block: 4096    regular file
Device: 10307h/66311d   Inode: 6714869    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/ sunbeam)   Gid: ( 1000/ sunbeam)
Access: 2023-12-09 15:43:04.539495220 +0530
Modify: 2023-12-06 18:20:29.187565771 +0530
Change: 2023-12-06 18:20:29.187565771 +0530
 Birth: 2023-12-06 18:19:50.287551835 +0530
sunbeam@sunbeam-HP:~$
```

6)touch(Change the time stamp of the file):-
7)touch(Create empty file):-

```
sunbeam@sunbeam-HP-Notebook:~$ touch ABC1.txt
sunbeam@sunbeam-HP-Notebook:~$ ls
 ABC1.txt              'dbt gogle notes.pdf'                            Music                 OOP_230940820004_REEXAM
 ABC2                   Desktop                                         mysql                 OOP_230940820004_REEXAM.zip
 ABC3                   Documents                                       Name.txt              OSC
 ADS_230940820004       Downloads                                       NodeJS_Demo           package.json
 commends               file5.txt                                       node_modules          package-lock.json
 cpp.txt                GD_BollyWood_Today_KD3.odt                       OOP_230940020004      Pictures
 cprogramming_80109     google-chrome-stable_current_amd64.deb           OOP_230940020004.zip  Public
 cprogramming_80109.zip Hacathon1                                        OOP_230940820004      Servers
sunbeam@sunbeam-HP-Notebook:~$
```

8)tail(Print all lines in a file from fifth line onwards):-

```
sunbeam@sunbeam-HP-Notebook:~$ cat > Akash.txt
VIRAT
AKASH
DHONI
MESSI
CHHETRI
RONALDO
P V SINDHU
NEERAJ CHOPRA
MANIKA BATRA
MODI
SRIKAR
SAM BAHADUR
sunbeam@sunbeam-HP-Notebook:~$ tail -n +5 Akash.txt
CHHETRI
RONALDO
P V SINDHU
NEERAJ CHOPRA
MANIKA BATRA
MODI
SRIKAR
SAM BAHADUR
sunbeam@sunbeam-HP-Notebook:~$
```

9)init 0, poweroff(Shutdown (Only for super-user)):-

-->sudo init 0

10)init 6, reboot(Reboot (Only for super-user)):-

-->sudo init 6

11)whoami(Find current user):-

```
sunbeam@sunbeam-HP:~$ whoami
sunbeam
sunbeam@sunbeam-HP:~$
```

12)tty(Find current terminal):-

```
sunbeam@sunbeam-HP:~$ tty
/dev/pts/0
sunbeam@sunbeam-HP:~$
```

13)who am i(Find current user and terminal):-

```
sunbeam@sunbeam-HP:~$ whoami ; hostname
sunbeam
sunbeam-HP
sunbeam@sunbeam-HP:~$ █
```

14)users(Find all users logged into the system):-

```
sunbeam@sunbeam-HP:~$ users
sunbeam
sunbeam@sunbeam-HP:~$
```

15)who(Find all users logged in and terminals in use):-

```
sunbeam@sunbeam-HP:~$ who
sunbeam   tty2          2023-12-09 13:58 (tty2)
sunbeam@sunbeam-HP:~$
```

16)grep, egrep, fgrep(Find a given word/pattern from the file):-

```
sunbeam@sunbeam-HP-Notebook:~$ grep  "AKASH" Akash.txt
AKASH
sunbeam@sunbeam-HP-Notebook:~$ █
```

17)chmod(Make a file as read-only):-

```
sunbeam@sunbeam-HP:~/OS$ chmod 755 File.txt
sunbeam@sunbeam-HP:~/OS$ ls
File.txt   hard_link
```

18)chmod(Make a file as write, read and execute):-

```
sunbeam@sunbeam-HP:~/OS$ chmod 755 File.txt
sunbeam@sunbeam-HP:~/OS$ ls
File.txt   hard_link
```

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

```
sunbeam@sunbeam-HP:~/OS$ wc File.txt
10 12 54 File.txt
```

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

```
sunbeam@sunbeam-HP:~/OS$ who | wc
      1       5      46
```

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

```
sunbeam@sunbeam-HP:~/OS$ head -n 5 File.txt | tail -n 10
java
cpp
core java
os
dsa
```

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

```
sunbeam@sunbeam-HP:~/OS$ sort File.txt | uniq File.txt
java
cpp
core java
os
dsa
awp
dbms
dbt
java advance
c
```

26)ls, grep (using pipe)(Display only hidden files in a directory):-

```
sunbeam@sunbeam-HP:~/OS$ ls -l | grep -E '^-|^l'
-rwxr-xr-x 2 sunbeam sunbeam 54 Dec 10 22:46 File.txt
-rwxr-xr-x 2 sunbeam sunbeam 54 Dec 10 22:46 hard_link
sunbeam@sunbeam-HP:~/OS$ ls -a | grep '^\.'
.
..
```

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

```
sunbeam@sunbeam-HP:~/OS$ tr -s '[:lower:]' '[:upper:]' <File.txt>output_File
sunbeam@sunbeam-HP:~/OS$ ls
File.txt  hard_link  output_File
sunbeam@sunbeam-HP:~/OS$ cat output_File
JAVA
CP
CORE JAVA
OS
DSA
AWP
DBMS
DBT
JAVA ADVANCE
C
```

28)cut(Split the file contents using delimiter and print required fields):-

```
sunbeam@sunbeam-HP:~/OS$ cut -d 'u' -f 1,3 File.txt
java
cpp
core java
os
dsa
awp
dbms
dbt
java advance
c
```