Problem Sheet-1

Sub:- Linux Fundamentals

Ques 1. Create a directory structure D1/D2/D3/D4 under the current directory.

```
┌──(kali㉿kali)-[~/linux]
└─$ mkdir -p D1/D2/D3/D5/
```

Ques 2. Copy file1 to file2 without any warning.

```
┌──(kali㉿kali)-[~/linux]
└─$ cp file1.txt file2.txt
```

Ques 3. Display name of files that begins with (.).

```
┌──(kali㉿kali)-[~]
└─$ ls -a
.              .bashrc           .config  Documents  .face.icon
..             .bashrc.original  Desktop  Downloads  .gnupg
.bash_logout   .cache            .dmrc    .face      .ICEauthority
```

Ques 4. Write command to display first seven line of the file.

```
┌──(kali㉿kali)-[~/linux]
└─$ head -7 file2.txt
hello my self devil
i'm creating this code
to check
whether i can
print 7 line
in the code
```

Ques 5. ls command with all option available with it.

```
┌──(kali㉿kali)-[~]
└─$ ls -l
total 32
drwxr-xr-x 4 kali kali 4096 Nov 26 02:48 Desktop
drwxr-xr-x 2 kali kali 4096 Nov 25 08:37 Documents
drwxr-xr-x 2 kali kali 4096 Nov 26 02:24 Downloads
drwxr-xr-x 2 kali kali 4096 Nov 25 08:37 Music
drwxr-xr-x 2 kali kali 4096 Nov 25 08:37 Pictures
drwxr-xr-x 2 kali kali 4096 Nov 25 08:37 Public
drwxr-xr-x 2 kali kali 4096 Nov 25 08:37 Templates
drwxr-xr-x 2 kali kali 4096 Nov 25 08:37 Videos
```

Ques 6. Move file that begin with x from current directory to the /user/bca01 directory.

```
┌──(kali㉿kali)-[~/linux]
└─$ mv X.txt /home/kali/linux/user/cs_26
```

Ques 7. Remove directory tree dir1/dir2/dir3 using single command.

```
┌──(kali㉿kali)-[~/linux]
└─$ rmdir -p D1/D2/D3/D5/
```

Ques 8. Remove all files of the current directory whose name start with (!).

```
┌──(kali㉿kali)-[~/Desktop/New Folder]
└─$ rm !
```

Ques 9. Rename file1 to file2.

```
┌──(kali㉿kali)-[~/Desktop/New Folder]
└─$ mv chetan chetan.txt
```

Ques 10. Rename f1 to f2 and move it directory dir1 of the current directory.

```
┌──(kali㉿kali)-[~/Desktop/linux]
└─$ mv f1.txt /home/kali/Desktop/linux/dir1/f2.txt
```

Ques 11. Switch to directory 2-level up.

```
┌──(kali㉿kali)-[~]
└─$ cd ../../
```

Ques 12. Store the sorted output of file1.txt into file2.txt.

```
┌──(kali㉿kali)-[~/linux]
└─$ cat chetan.txt > new.txt
```

Ques 13. Store the number of lines, words of file (bca)to output file.(i.e from bca file no. of lines and words stored in the file name(output)).

```
┌──(kali㉿kali)-[~/linux]
└─$ wc file01.txt > output

┌──(kali㉿kali)-[~/linux]
└─$ cat output
 4  14 146 file01.txt
```

Ques 14. Create a directory named TYBCA having initial permission to owner, group and other is read and execute.

```
┌──(kali㉿kali)-[~/linux/user]
└─$ chmod +777 TYBCA

┌──(kali㉿kali)-[~/linux/user]
└─$ ls -l
total 8
drwxr-xr-x 2 kali kali 4096 Nov 15 08:45 cs_26
drwxrwxrwx 2 kali kali 4096 Nov 15 09:54 TYBCA
```

Ques 15 . Copy only those files to directory d1 which begin with character 'a'.

```
┌──(kali㉿kali)-[~/Desktop/linux]
└─$ cp [a]*.txt dir1
```

Ques 16 . Remove all files of current directory whose first character must be asterisk (*).

```
┌──(kali㉿kali)-[~/Desktop/linux/dir1]
└─$ ls
'*chetan.txt'   '*ch.txt'    f2.txt

┌──(kali㉿kali)-[~/Desktop/linux/dir1]
└─$ rm [*]*.txt

┌──(kali㉿kali)-[~/Desktop/linux/dir1]
└─$ ls
f2.txt
```

Ques 17. Copy files of the current directory to d1 in which file name contains digits anywhere in the filename.

```
┌──(kali㉿kali)-[~/Desktop/linux]
└─$ ls
chetan26.txt  d3vil.txt  devil.txt  dir1

┌──(kali㉿kali)-[~/Desktop/linux]
└─$ cp [^0-9]*.txt dir1

┌──(kali㉿kali)-[~/Desktop/linux]
└─$ cd dir1 && ls
chetan26.txt  d3vil.txt  devil.txt
```

Ques 18. Create a directory with permission read and write for owner, write and execute for group and read and execute for other user.

```
┌──(kali㉿kali)-[~/linux/user]
└─$ chmod +777 TYBCA

┌──(kali㉿kali)-[~/linux/user]
└─$ ls -l
total 8
drwxr-xr-x 2 kali kali 4096 Nov 15 08:45 cs_26
drwxrwxrwx 2 kali kali 4096 Nov 15 09:54 TYBCA
```

Ques 19. Display Julian calendar for month 9 of 2020.

```
┌──(kali㉿kali)-[~/Desktop]
└─$ cal 9 2020
   September 2020
Su Mo Tu We Th Fr Sa
        1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30
```

Ques 20. Redirect output of echo command in text1 file.

```
┌──(kali㉿kali)-[~/linux]
└─$ echo "hello devil" > chetan.txt

┌──(kali㉿kali)-[~/linux]
└─$ cat chetan.txt
hello devil
```

Ques 21. Calculate total words of text1 file.

```
┌──(kali㉿kali)-[~/linux]
└─$ wc -c file3.txt
78 file3.txt
```

Ques 22. Display current date and time.

```
┌──(kali㉿kali)-[~/linux]
└─$ date
Tue Nov 15 09:17:08 AM EST 2022
```

Ques 23. Remove all the space between string.

```
┌──(kali㉿kali)-[~/Desktop/linux]
└─$ cat chetan26.txt
linux is
based on unix os

unix is command based but
linux also support cli mode.

┌──(kali㉿kali)-[~/Desktop/linux]
└─$ grep -e "\s" chetan26.txt
linux is
based on unix os
unix is command based but
linux also support cli mode.
```

Ques 24. Change name of file text1 to file1. And copy file1 in D1 directory.

```
┌──(kali㉿kali)-[~/Desktop/linux]
└─$ mv devil.txt dir1/file1.txt
```

Ques 25. Display last 2 lines of text1 file.

```
┌──(kali㉿kali)-[~/linux]
└─$ tail -n 2 file3.txt
this is line 4
this is last line
```