ASSIGNMENT-1

(Basic Commands in Linux Operating System)

1. **Design a date command with options such that the output is**
   Today's date: dd/mm/yyyy
   Current time: hh:mm:ss

date +"Today's date: %d/%m/%y%nCurrent time:%T"

"OR"

date +"Today's date: %d/%m/%y%nCurrent time:%H:%M:%S"

```
amlan@Amlan:/mnt/d/OS_Lab$ date +"Today's date: %d/%m/%y%nCurrent time:%T"
Today's date: 01/03/24
Current time:11:02:55
amlan@Amlan:/mnt/d/OS_Lab$ date +"Today's date: %d/%m/%y%nCurrent time:%H:%M:%S"
Today's date: 01/03/24
Current time:11:03:22
```

2. **Design a cal command with options to print the calendar of a specific month of a specific year.**

cal 07 2024

```
amlan@Amlan:/mnt/d/OS_Lab$ cal 07 2024
      July 2024
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 31
```

3. **Use touch command to create a file with date and time different from current date and time.**

touch -t '202407211105' amlan

```
amlan@Amlan:/mnt/d/OS_Lab$ touch -t '202407211105' amlan
amlan@Amlan:/mnt/d/OS_Lab$ ls
amlan  bb
amlan@Amlan:/mnt/d/OS_Lab$ ls -l
total 0
-rwxrwxrwx 1 amlan amlan  0 Jul 21  2024 amlan
-rwxrwxrwx 1 amlan amlan 17 Mar  1 10:41 bb
```

4. **Use who command to find out number of users (user count) logged in.**

who -u

```
amlan@Amlan:/mnt/d/OS_Lab$ who -u
amlan    pts/1           2024-03-01 10:01 01:14              707
```

5. **Use ls command to sort the list according to**

      a. **File name (descending) and display with their inode numbers.**
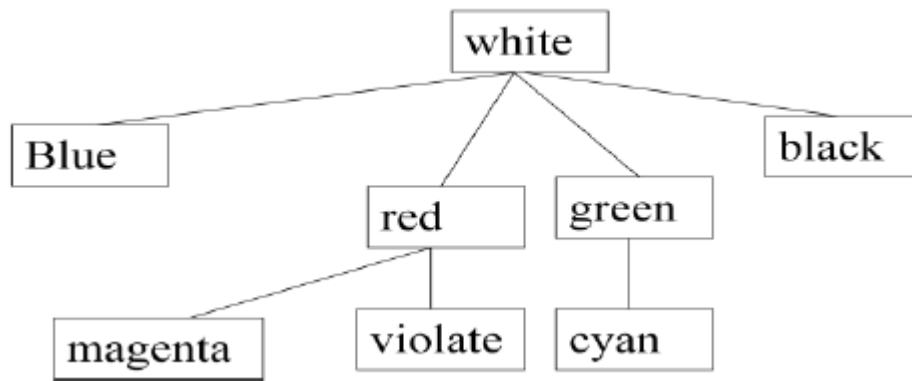   b. **Size of file (ascending) and display names in one column.**

ls -i -r

ls –sort=size -r -1

```
amlan@Amlan:/mnt/d/OS_Lab$ ls -i -r
1125899906864969 white  1125899906864963 bb  1125899906864966 amlan
amlan@Amlan:/mnt/d/OS_Lab$ ls --sort=size  -r -1
amlan
bb
white
```

6. **Create a directory structure as given below.**

mkdir white

cd white

mkdir Blue

mkdir red

mkdir green

mkdir black

cd red

mkdir magenta

mkdir violet

cd ..

cd green

mkdir cyan

7. **Change directory from white to violet.**

   cd red/violet

8. **Change directory from violet to blue.**

   cd ../../blue

9. **Change directory from blue to black.**

   cd ../black

10. Change directory from black to cyan.

    cd ../green/cyan

11. Create one file under blue and copy it into magenta directory.

    cd white

    cd blue

    touch amlan

    cp amlan ../red/magenta

12. Move the file under magenta to black.

    mv amlan ../../black

13. Move entire black directory to blue.

    mv black blue

14. Delete the file under blue.

    rm OSfile

15. Delete the directory cyan.

    rmdir cyan

16. Delete the directory red.

    rm -r red

17. Copy entire black directory under green.

    cp -r black ../green

18. Delete the directory black under blue.

    rm -r black