Operating System
Assignment no 5

1) Write a shell script to display your LOGIN NAME and HOME directory.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign01.sh
sunbeam
 adv                        Documents                  Music
'advjava(labexam)'          Downloads                  OS
'adv_java self'            'github token.odt'          OS_ASSIGNMENT
 Android                    hackathon                  Pictures
 AndroidStudioProjects      hackathon.zip              PROGRAMMING
'Core java'                'hybrid<80437>'             Public
 Corejava_230944221048     'hybrid<80437>.zip'        'self adv java'
 Core_Java_assignment_DMC  'Hybrid programming'        snap
'core java self'           'Hybrid Programming self'   SpringMvc-1
 DBMS                      'Java<230944221048>'        Templates
'DBMS SELF'                 Java_Assignment_Dmc        test
 Desktop                   'module android'            Videos
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$
```

2) Write a shell script to display menu like "1. Date, 2. Cal, 3. Ls, 4. Pwd, 5. Exit" and execute the commands depending on user choice.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign02.sh
1.Date 2.Cal 3.ls 4.Pwd 5.Exit
2
   December 2023
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
1.Date 2.Cal 3.ls 4.Pwd 5.Exit
3
assign01.sh  assign02.sh
1.Date 2.Cal 3.ls 4.Pwd 5.Exit
1
Friday 29 December 2023 11:24:45 PM IST
1.Date 2.Cal 3.ls 4.Pwd 5.Exit
4
/home/sunbeam/Desktop/lab
1.Date 2.Cal 3.ls 4.Pwd 5.Exit
5
```

3) Write a shell script to accept the name from the user and check whether user entered name is file or directory. If name is file display its size and if it is directory display its contents.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign03.sh
Enter Path
one
1.txt  2.txt  3.txt  4.txt
```

4) Write a shell script to determine whether a given number is prime or not.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ vim assign04.sh
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign04.sh
Enter Number
5
Prime Number
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign04.sh
Enter Number
6
Not A Prime Number
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$
```

5) Write a Program to find the greatest of three numbers.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign05.sh
Enter 3 Number
34 45 67
3rd Number is Greatest
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign05.sh
Enter 3 Number
89 56 78
1st Number is Greatest
```

6) Write a Program to find whether a given year is a leap year or not

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign06.sh
Enter Number
2002
Non Leap Year
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign06.sh
Enter Number
2016
Leap Year
```

7) Write a Program to find whether a given number is positive or negative.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign07.sh
Enter Number
5
Number is Positive
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign07.sh
Enter Number
-9
Number is Negative
```

8) Write a program to print the table of a given number.

9) Write a program to find the factorial of given number.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign09.sh
Enter Number
6
Factorial = 720
```

10) Write a program to find given number of terms in the Fibonacci series.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop/lab$ bash assign10.sh
Enter Number
10
1 ,2 ,3 ,5 ,8 ,13 ,21 ,34 ,55 ,89 ,sunbeam@sunbeam-Nitro-AN515-42:
```

11) Write a program to calculate gross salary if the DA is 40%, HRA is 20% of basic salary. Accept basic salary form user and display gross salary (Result can be floating point value).

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop$ bash assign11.sh
Enter Number
456.7
730.6
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop$
```

12) Write a shell script to accept a filename as argument and displays the last modification time if the file exists and a suitable message if it doesn't exist.

13) Write a shell script to display only hidden file of current directory.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop$ vim assign13.sh
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop$ bash assign13.sh
.
..
.hidden.txt
.script7.sh.swp
```

14) Write a shell script to display only executable files of current directory.

15) Accept the two file names from user and append the contents in reverse case of first file into second file.

16) Write a shell script to display welcome message to the user along with contents of his home directory. Ensure that shell script will execute automatically when user login to the shell. (Make entry of your shell script into .bashrc file into your home directory).

```
Welcome Lokesh !!
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop$
```

17) Print the following pattern.

```
sunbeam@sunbeam-Nitro-AN515-42:~/Desktop$ bash assign17.sh
*
* *
* * *
* * * *
* * * * *
* * * * * *
* * * * * * *
```