

### Linux Shell Script Assignment – 3

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash demo.sh
User is :
shubham shubham
Home Dir:
total 36
drwxr-xr-x 2 shubham shubham 4096 Oct 25 20:34 Desktop
drwxr-xr-x 2 shubham shubham 4096 Oct 29 19:37 Documents
drwxr-xr-x 6 shubham shubham 4096 Oct 29 23:35 Downloads
drwxr-xr-x 2 shubham shubham 4096 Oct 25 20:34 Music
drwxr-xr-x 3 shubham shubham 4096 Oct 25 19:06 Pictures
drwxr-xr-x 2 shubham shubham 4096 Oct 25 20:34 Public
drwx----- 7 shubham shubham 4096 Oct 25 18:03 snap
drwxr-xr-x 2 shubham shubham 4096 Oct 25 20:34 Templates
drwxr-xr-x 2 shubham shubham 4096 Oct 25 20:34 Videos
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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.

```
5
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ vim que2.sh
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que2.sh
1.Date
2.Cal
3.Ls
4.Pwd
5.Exit
Enter the choice:
1
Thu Oct 30 12:01:35 AM IST 2025
1.Date
2.Cal
3.Ls
4.Pwd
5.Exit
Enter the choice:
2
      October 2025
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
Enter the choice:
3
demo.sh  que2.sh  que2.txt
1.Date
2.Cal
3.Ls
4.Pwd
5.Exit
Enter the choice:
4
/home/shubham/Downloads/OS/Assignments/SDM/Assignment-7
1.Date
2.Cal
3.Ls
4.Pwd
5.Exit
Enter the choice:
5
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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.

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que3.sh
Enter the string:
que2.txt
entered name is of file
size of the file is:
4 que2.txt
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que3.sh
Enter the string:
shubham_dir
entered name is of dir
total 0
-rw-rw-r-- 1 shubham shubham 0 Oct 30 19:53 file1.txt
-rw-rw-r-- 1 shubham shubham 0 Oct 30 19:53 file2.txt
-rw-rw-r-- 1 shubham shubham 0 Oct 30 19:53 file3.txt
-rw-rw-r-- 1 shubham shubham 0 Oct 30 19:53 file4.txt
-rw-rw-r-- 1 shubham shubham 0 Oct 30 19:53 file5.txt
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que4.sh
Enter the number: 12
12
12 is not prime
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ 13
13: command not found
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que4.sh
Enter the number: 13
13
13 is prime number
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que5.sh
Enter num1: 1
Enter num2: 2
Enter num3: 3
Greatest num is : 3
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que6.sh
Enter the year: 2002
2002 is not leap year
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que6.sh
Enter the year: 2000
2000 is Leap Year
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que7.sh
Enter the num: 5
num is positive
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que7.sh
Enter the num: -7
num is negative
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que7.sh
Enter the num: 0
num is 0
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ vim que8.sh
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que8.sh
Enter the num: 5
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
5 * 5 = 25
5 * 6 = 30
5 * 7 = 35
5 * 8 = 40
5 * 9 = 45
5 * 10 = 50
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ vim que9.sh
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que9.sh
Enter a number to find its factorial: 5
Factorial of 5 is: 120
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ vim que10.sh
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que10.sh
Enter the number of terms: 5
Fibonacci series up to 5 terms:
0 1 1 2 3
```

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).

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que11.sh
Enter the Basic Salary:-10000
entered sal is 10000
gross sal is : 16000.0
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que11.sh
Enter the Basic Salary:-80000
entered sal is 80000
gross sal is : 128000.0
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que11.sh
Enter the Basic Salary:-100000
entered sal is 100000
gross sal is : 160000.0
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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.

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que12.sh
Enter the file name: que2.txt
2025-10-29 23:52:28.271593517 +0530
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que13.sh
.
..
.shubham.txt
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ vim que14.sh
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que14.sh
que2.txt
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

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

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que15.sh
Enter the file 1: demo1.txt
Enter the file 2: demo2.txt
Successfully appended contents of 'demo1.txt' (with case reversed) to 'demo2.txt'.
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ cat demo2.txt
Pratik is student
SHUBHAM
sHINDE
rAM IS GOOD bOY
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ cat demo2.txt
```

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).

File Name => que16.sh

```
Wel Come Shubham
total 76
drwxrwxr-x 3 shubham shubham 4096 Nov  3 14:03 .
drwxrwxr-x 9 shubham shubham 4096 Oct 29 23:38 ..
-rw-rw-r-- 1 shubham shubham  31 Nov  3 07:00 demo1.txt
-rw-rw-r-- 1 shubham shubham  80 Nov  3 14:03 demo2.txt
-rw-rw-r-- 1 shubham shubham 250 Nov  1 13:01 que11.sh
-rw-rw-r-- 1 shubham shubham 127 Nov  3 06:38 que12.sh
-rw-rw-r-- 1 shubham shubham  24 Nov  3 06:45 que13.sh
-rw-rw-r-- 1 shubham shubham  95 Nov  3 06:55 que14.sh
-rw-rw-r-- 1 shubham shubham 401 Nov  3 14:03 que15.sh
-rw-rw-r-- 1 shubham shubham  53 Oct 29 23:45 que1.sh
-rw-rw-r-- 1 shubham shubham 195 Oct 30 00:01 que2.sh
-rwxrwxrwx 1 shubham shubham 128 Oct 29 23:52 que2.txt
-rw-rw-r-- 1 shubham shubham 265 Oct 30 19:54 que3.sh
-rw-rw-r-- 1 shubham shubham 288 Oct 30 20:12 que4.sh
-rw-rw-r-- 1 shubham shubham 292 Oct 30 22:10 que5.sh
-rw-rw-r-- 1 shubham shubham 252 Oct 30 22:24 que6.sh
-rw-rw-r-- 1 shubham shubham 154 Oct 30 22:28 que7.sh
-rw-rw-r-- 1 shubham shubham 112 Oct 30 22:34 que8.sh
-rw-rw-r-- 1 shubham shubham   0 Nov  1 18:09 que9.sh
drwxrwxr-x 2 shubham shubham 4096 Oct 30 19:53 shubham_dir
-rw-rw-r-- 1 shubham shubham   0 Nov  3 06:42 .shubham.txt
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```

17. Print the following pattern.

```
*
* *
* * *
* * * *
* * * * *
```

```
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ vim que17.sh
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que17.sh
Enter the num of rows:-5
*
* *
* * *
* * * *
* * * * *

shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ vim que17.sh
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ 10
10: command not found
shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$ bash que17.sh
Enter the num of rows:-10
*
* *
* * *
* * * *
* * * * *
* * * * * *
* * * * * * *
* * * * * * * *
* * * * * * * * *
* * * * * * * * * *

shubham@D3-Shubham-92819:~/Downloads/OS/Assignments/SDM/Assignment-7$
```