Q1. Write a shell script to display your LOGIN NAME and HOME directory.

```
osboxes@osboxes:~/Desktop/Assignment5$ echo $LOGNAME
osboxes
osboxes@osboxes:~/Desktop/Assignment5$ echo $HOME
/home/osboxes
osboxes@osboxes:~/Desktop/Assignment5$
```

Q2. Write a shell script to display a menu like "1. Date, 2. Cal, 3. Ls, 4. Pwd, 5. Exit" and execute the commands depending on user choice.

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q2.sh
1) Date
2) Cal
3) Ls
4) PWD
5) Exit
#? 1
date is:
Mon Oct 14 12:56:17 PM EDT 2024
#? 2
calender is:
    October 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
Content of current directory are:
Q2.sh  Q3.sh
#? 4
Present working directory is:
/home/osboxes/Desktop/Assignment5
#?
```

Q3. Write a shell script to accept the name from the user and check whether the user entered name is file or directory. If the name is file display its size and if it is directory display its contents.

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q3.sh
Enter name:
dir1
Path Exist
dir1 is directory
content in directory is: dir1 Q2.sh Q3.sh
osboxes@osboxes:~/Desktop/Assignment5$
```

Q4. Write a shell script to determine whether a given number is prime or not

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q4.sh
Enter a number
23
Number is prime
osboxes@osboxes:~/Desktop/Assignment5$ bash Q4.sh
Enter a number
10
Number is not prime
osboxes@osboxes:~/Desktop/Assignment5$
```

Q5. Write a Program to find the greatest of three numbers

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q5.sh
Enter Three numbers:
40 50 20
50 is greatest
```

Q6. Write a Program to find whether a given year is a leap year or not

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q6.sh
Enter a year:
2000
Year is leap year
osboxes@osboxes:~/Desktop/Assignment5$ bash Q6.sh
Enter a year:
1992
Year is leap year
osboxes@osboxes:~/Desktop/Assignment5$ bash Q6.sh
Enter a year:
1994
Year is not leap year
```

Q7. Write a Program to find whether a given number is positive or negative

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q7.sh
Enter a number:
24
Number is positive
osboxes@osboxes:~/Desktop/Assignment5$ bash Q7.sh
Enter a number:
-41
Number is negative
osboxes@osboxes:~/Desktop/Assignment5$ bash Q7.sh
Enter a number:
0
Number is equal to 0
```

Q8. Write a program to print the table of a given number.

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q8.sh
Enter a number
23
Table of 23
23
46
69
92
115
138
161
184
207
230
```

Q9. Write a program to find the factorial of a given number.

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q9.sh
Enter a number:
5
factorial is: 120
```

Q10. Write a program to find a given number of terms in the Fibonacci series.

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q10.sh
Enter a number:
8
0 1 1 2 3 5 8 13
count is: 8
```

Q11. 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).

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q11.sh
Enter a basic salary:
20000
Gross salary is : 32000.00
osboxes@osboxes:~/Desktop/Assignment5$
```

Q12. Write a shell script to accept a filename as argument and display the last modification time if the file exists and a suitable message if it doesn't exist.

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q12.sh
Enter file name:
Q3.sh
Last Modification time: 2024-10-14 13:18:22.419000000 -0400
osboxes@osboxes:~/Desktop/Assignment5$
```

Q13. Write a shell script to display only hidden files of the current directory.

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q13.sh
hidden files:
osboxes@osboxes:~/Desktop/Assignment5$
```

Q14. Write a shell script to display only executable files of the current directory.

```
osboxes@osboxes:~/Desktop/Assignment5$ bash Q14.sh
executable files:
./Q5.sh
osboxes@osboxes:~/Desktop/Assignment5$
```

Q15. Accept the two file names from the user and append the contents in the reverse case of the first file into the second file.

```
osboxes@osboxes:~/Desktop/Assignment5$ bash file.txt
Hello How are you?
osboxes@osboxes:~/Desktop/Assignment5$ bash file1.txt
Welcome to sunbeam...!
osboxes@osboxes:~/Desktop/Assignment5$ bash Q15.sh
Enter first file name:
file.txt
Enter second file name:
file1.txt
Content of file.txt appendend in reverse case to file1.txt
osboxes@osboxes:~/Desktop/Assignment5$ bash file1.txt
Welcome to sunbeam...!
hELLO hOW ARE YOU?
osboxes@osboxes:~/Desktop/Assignment5$
```

Q16. Write a shell script to display a welcome message to the user along with contents of his home directory. Ensure that the shell script will execute automatically when the user login to the shell. (Make entry of your shell script into .bashrc file into your home directory).

Welcome to sunbeam
Content of home directory
demo01.c   Documents   err.txt   Pictures   scripr01.sh   snap   Videos
Desktop   Downloads   Music   Public   script1.sh   Templates   vim.txt
osboxes@osboxes:~$

Q17. Print the following pattern.

```
*

* *

* * *

* * * *

* * * * *
```


osboxes@osboxes:~/Desktop/Assignment5$ vim Q17.sh
osboxes@osboxes:~/Desktop/Assignment5$ bash Q17.sh
*
**
***
****
*****
osboxes@osboxes:~/Desktop/Assignment5$