Assignment-1

1) Write a simple python program for a calculator that can do as many calculations as the user wants and will stop the calculation till the user enters a character (a to z).

2) Write a Python program to find the second largest number of three values. (HINT: use nested 'if else')
   Expected output:

   ```
   Input first number: 15
   Input second number: 26
   Input third number: 29
   The second largest number is 26
   ```

3) Write a Python program to create the multiplication table (from 1 to 10) of a number (HINT: Use 'for' loop)
   Expected output:

   ```
   Input a number: 6
   6 x 1 = 6
   6 x 2 = 12
   6 x 3 = 18
   6 x 4 = 24
   6 x 5 = 30
   6 x 6 = 36
   6 x 7 = 42
   6 x 8 = 48
   6 x 9 = 54
   6 x 10 = 60
   ```

4) Write a Python program to calculate the sum and average of 10 float numbers (Take input from user, Use while control loop)

5) A retail store management wants to automate the process of generating the bill amount for its customers. And wants to perform following tasks:
   To calculate the bill, the cashier must enter the name of each item purchased from the store and its price. The program should now calculate the total bill amount.

   i. The retail store management now wants to provide 2% discount for all bill amounts above Rs. 500 and for all other bill amounts, a discount of 1%.

   ii. Suppose the retail store management now wants to provide discount for all bills amounts as mentioned below in table.

Bill Amount	Discount %
>= 1000	5
>=500 and <1000	2
>0 and <500	1

6) Write a code to display all even numbers between 50 to 80. (NOTE: use 'for' loop with 'range'; also use 'if else' condition)

7) Write a Python program to construct the following pattern, using a nested for loop.

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