Lab 4- Functions

1. Write a script that prints “I love programming” 5 times. You must create a function called display() that does the above-mentioned.

2. Write a program that requests from the user two numbers. The program is required to calculate the sum of the two numbers received from the user and display the output to the user. The sum must be calculated by creating a function called **sum** which receives two arguments, calculates the sum of the two values and returns the answer to the calling function.

3. Write a program to calculate the square of a number. The square must be calculated by creating a function called **sqr** which receives the appropriate parameters, calculates the square of the number and returns it to the calling function.

4. Write a program to calculate the cube of a number. The square must be calculated by creating a function called **cube** which receives the appropriate parameters, calculates the cube of the number and returns it to the calling function.

5. Write a program that calculates an Area of a circle. The area of the circle must be calculated by creating a function called **areaCircle** which receives the appropriate arguments, calculates the area and returns it to the calling function.

6. Write a program that will read two numbers and an integer code from the keyboard. The value of the integer code should be 1, 2, 3 or 4. If the value of the code is 1, compute the sum of the two numbers. If the code is 2, compute the difference (first minus second). If the code is 3, compute the product of the two numbers. If the code is 4, and the second number is not zero, compute

the quotient (first divided by the second). If the code is not equal to 1, 2, 3 or 4, display an error message. The program is then to display the two numbers, the integer code and the computed result to the screen.

7. Write a program that requests from the user an integer value. The program is required to determine if the value entered by the user is an even or odd number. Write a function **isEven** which accepts the integer values and returns true if the integer value is even and false if the value is odd.

8. Write a program that will prompt the user for 3 numbers and then print out all the factors of each of the numbers.

   Your program must include a function for the following:

   1. Determine the factors for any given number and return the factors to a calling function.
   2. Another function that will print out the factors.