Tutorial 1

IT1010 – Introduction to Programming   **Semester 1, 2022**

Exercise 1: Practice using printf statement

Write a C program to,
    i.   Display your name.

    ii.   Display the message "Welcome to SLIIT" with each word on a separate line.
           (hint: use one printf statement)

    iii.   Display the message "Welcome to SLIIT" with the words separated by tabs.

    iv.   Display the following shapes with asterisks.

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

Exercise 2 : Draw flowcharts to,

  i.   Print "Hello World"

  ii.   Calculate the perimeter and area of a rectangle given the length and the width.

  iii.   Input the marks of two subjects and calculate the average mark.

Exercise 3: Analyse the following scenarios and identify the input, output and calculation

  i.   Convert Celsius to Fahrenheit.

  ii.   To travel from home to SLIIT Campus, a particular student needs to take three buses.
         Input the fares of each bus and estimate the traveling expenditure of the student for the
         entire semester.

         (Assume that there are 5 days per week and 14 weeks for the semester).

  iii.   A company is planning to give bonus to all the employees during the festive season.
          20% of the basic salary of an employee is given as the bonus. Calculate the bonus.