

# Tutorial 01

## **Answer all questions.**

1. Write a Console Application Program to calculate the area of a rectangle. Prompt the user to enter the length and width. Display the calculated area. (use a separate function to calculate the area)

2. Write a Console Application program to check if the given 10 number inputs are even or odd. Prompt the user to enter the numbers, and display whether it's even or odd.

3. Write a Console Application program to calculate the sum of all numbers from 1 to a given positive integer. Prompt the user to enter a positive integer and display the sum. If the user inputs a negative value it should display "ERROR".

4. Write a Console Application program to print the first N terms of the Fibonacci series. Prompt the user to enter the value of N (Use recursion)

5. Write a Console Application program to display the multiplication table of a given number. Prompt the user to enter a number and display its multiplication table. (Use loops)

6. Create a C# console application that prompts the user to input a student's name and their exam marks. Based on the provided marks, determine, and display the corresponding grade for the student. The grading scale is as follows:

- If the marks are between 75 and 100 (inclusive), assign Grade A.
- For marks between 60 and 74 (inclusive), assign Grade B.
- For marks between 50 and 59 (inclusive), assign Grade C
- For marks between 40 and 49 (inclusive), assign Grade D.
- If the marks are below 40, the student has failed.

Display the student's name along with their assigned grade at the end of the program.

Validate the user input so that when the user inputs a value higher than 100 and less than 0 it displays an error message.

7. Write a Console Application program to simulate a basic ATM machine. Allow the user to check balance, deposit money, and withdraw money. Display appropriate messages based on user actions. (Create separate functions for individual operations)