

## Module 5 Lab Assignment.

In this lab assignment, you will develop a simple calculator. You will use **the guided source code** file prepared for this assignment. Please do not create a new project. Instead, please download the zip file attached to the assignment in OdtüClass. This zip file contains the project with the guided source code.

## Guided Source Code

Below is a small snapshot from the source code file that you will use in this assignment. This file will already have some codes written for your convenience and it will contain the detailed instructions to guide your coding. These instructors are provided as comments. Make sure you read each comment line carefully.

The coding for this application is divided into 4 parts, which are indicated using regions in your code file, as shown below.

```
public partial class Form1 : Form
{
    public Form1()
    {
        InitializeComponent();
    }

    //Global variables defined [please do not change anything]
    int number1 = 0;
    int number2 = 0;
    int result = 0;

    PART1: CHECKING AGAINST INVALID ENTRIES

    PART2: MAKING THE CALCULATION

    PART3: INCREMENTING THE RESULT

    PART4: DECREMENTING THE RESULT
}
```

When you expand a region, you will see the detailed explanation about the purpose of that part and find instructions to guide your coding. The specific locations where you need to write code are indicated explicitly

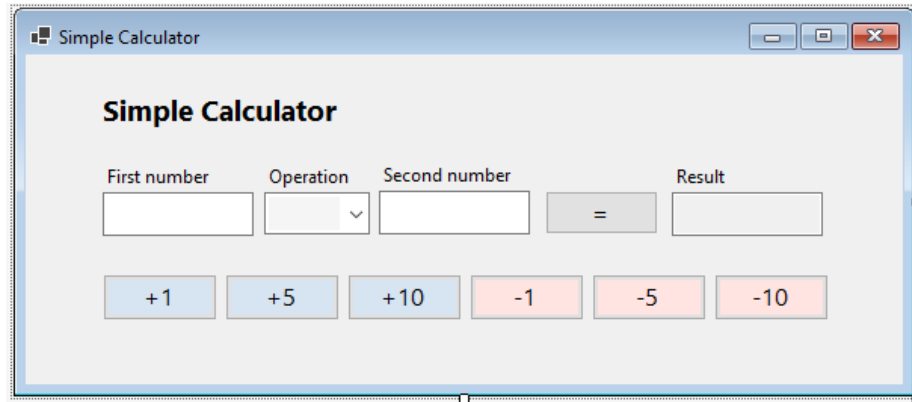
```
#region PART2: MAKING THE CALCULATION
/// <summary>
/// In Part 2, the goal is to make the intended computation.
/// You will need to apply the selected operation on number1 and number2.
/// number1 and number2 should have been properly set in Part1 above.
/// </summary>
/// <Difficulty 2 over 5></Difficulty>
/// <Points 0.2></Points>

//Click event handler for = (calculate) button.
private void btn_calculate_Click(object sender, EventArgs e)
{
    //Use if-else-if to check the operation type from cmb_operation
    //and perform the selected operation (+, -, /, or *)
    //using the number1 and number2.
    //YOUR CODE GOES HERE

    //print the result in txt_result
    //YOUR CODE GOES HERE
}
#endregion
```

## The Interface

The project also has the form designed for your convenience as seen below. You should NOT change anything in the interface.



A screenshot of a software window titled "Simple Calculator". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. The main content area is light gray and contains the following elements:

- Simple Calculator**: A bold title centered at the top of the main area.
- Form Fields**: A row of four input fields with labels above them:
  - First number**: A text input field.
  - Operation**: A dropdown menu with a small downward arrow.
  - Second number**: A text input field.
  - Result**: A text input field.
- Buttons**: A row of six buttons below the input fields:
  - + 1**: Light blue button.
  - + 5**: Light blue button.
  - + 10**: Light blue button.
  - 1**: Light red button.
  - 5**: Light red button.
  - 10**: Light red button.
- Equals Button**: A gray button with an equals sign (=) located between the "Second number" and "Result" fields.