

Lab 4.2 - Design a simple form Calculator

In this exercise, you'll design a form that lets the user enter two numbers and then displays the result of one of 4 arithmetical operations when the user clicks the Calculate button.

1. Start a new project named **SimleCalculator** in the **Exercises** directory. Be sure to store the solution in its own directory.

Add the labels, text boxes, and buttons to the form as shown above. Then, set the properties of these controls as follows:

Default name	Property	Setting
label1	Text	First Number:
	TextAlign	MiddleLeft
label2	Text	Operateur:
	TextAlign	MiddleLeft
label3	Text	Second Number:
	TextAlign	MiddleLeft
label4	Text	=
	TextAlign	MiddleLeft
label5	Text	Result:
	TextAlign	MiddleLeft
textBox1	Name	txtNumber1
	TabIndex	0
textBox2	Name	txtNumber2
	TabIndex	2
textBox3	Name	txtResult
	ReadOnly	True
	Text	0
	TabStop	False
comboBox1	Name	comboOper
	Items	+
		-
		*
		/
button1	TabIndex	1
	Name	btnCalculate
	Text	&Calculate
button2	TabIndex	3
	Name	btnReset
	Text	&Reset
button3	TabIndex	4
	Name	btnExit
	Text	E&xit
	TabIndex	5

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2. Now, set the properties of the form as follows:

Default name	Property	Setting
Form1	Text	Calculate Letter Grade
	AcceptButton	btnCalculate
	CancelButton	btnExit
	StartPosition	CenterScreen

3. Use the Form Designer to adjust the size and position of the controls and the size of the form so they look professional.
4. Rename the form to frmSimpleCalculator. When you're asked if you want to rename any references to the form, click the Yes button.
5. Save the project and all of its files.

Code and test the Calculator form

In this exercise, you'll add code to the Simple Calculator form. Then, you'll build and test the project to be sure it works correctly.

1. Display the form in the Form Designer, and double-click the Calculate button to generate a Click event handler for it. Then, add the statements to the event handler to get the values entered by the user and display the total on the txtResult text box.
2. Add this statement to the Calculate button, to move the focus back to the Number 1 or Number 2 text box after the try & catch test:

```
txtNumber1.Text = "";
```

```
txtNumber1.Focus();
```

```
txtNumber2.Text = "";
```

```
txtNumber2.Focus();
```

3. Return to the Form Designer, and then double-click the Exit button to generate a Click event handler for it. Then, add this statement to the event handler to close the form:

```
this.Close();
```

Add control comboBox to the form. Then, set the properties of this control as follows:

Default name	Property	Setting
comboBox1	Name	cboOperators
	TabIndex	1

Return to the Form Designer, and then add to property Items the 4 operators (+, -, *, /).

Run the application, enter different values into the two text boxes, choose one operator from combo box, and then click the Calculate button. When you're done, press the Esc key to end the application

Compress and upload the C# Windows Form solution by LEA of Omnivox.

Thank you