01). Design a Windows Form Application to get 2 user inputs and display the addition of those 2 numbers Separately.

```
using System;
using System.Windows.Forms;

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

      private void btnCalculate_Click(object sender, EventArgs e)
      {
         // Parse input values
         int num1 = int.Parse(txtNum1.Text);
         int num2 = int.Parse(txtNum2.Text);

         // Perform addition
         int result = num1 + num2;

         // Display result
         lblResult.Text = "Result: " + result.ToString();
      }
   }
}
```

02). Modify the Application to be able to perform all four basic arithmetic operations (+ - / x) on click.

```
private void btnCalculate_Click(object sender, EventArgs e)
{
   int num1 = int.Parse(txtNum1.Text);
   int num2 = int.Parse(txtNum2.Text);
   char operation = cboOperation.Text[0]; // Assuming the operation is selected from a ComboBox

   int result = 0;
   switch (operation)
   {
      case '+':
         result = num1 + num2;
         break;
      case '-':
         result = num1 - num2;
         break;
      case 'x':
         result = num1 * num2;
         break;
      case '/':
         if (num2 != 0)
            result = num1 / num2;
         else
            MessageBox.Show("Cannot divide by zero!");
         break;
      default:
```

```
        MessageBox.Show("Invalid operation!");
        break;
    }

    lblResult.Text = "Result: " + result.ToString();
}
```

03). Modify the application so that there will only be one input field which will be used to input both numbers.

```
private void btnCalculate_Click(object sender, EventArgs e)
{
    string[] input = txtInput.Text.Split(' ');
    if (input.Length != 3)
    {
        MessageBox.Show("Invalid input format. Please enter two numbers followed by an operator separated by spaces.");
        return;
    }

    int num1, num2;
    if (!int.TryParse(input[0], out num1) || !int.TryParse(input[2], out num2))
    {
        MessageBox.Show("Invalid number format. Please enter valid integers.");
        return;
    }

    char operation = input[1][0];
    int result = 0;
    switch (operation)
```

```
  {
    case '+':
      result = num1 + num2;
      break;
    case '-':
      result = num1 - num2;
      break;
    case 'x':
      result = num1 * num2;
      break;
    case '/':
      if (num2 != 0)
        result = num1 / num2;
      else
        MessageBox.Show("Cannot divide by zero!");
      break;
    default:
      MessageBox.Show("Invalid operation!");
      break;
  }

  lblResult.Text = "Result: " + result.ToString();
}
```

04). Design a conventional Calculator.

To design a conventional calculator, you can use the Windows Forms designer in Visual Studio or any other tool of your choice. You'll need buttons for digits, operations, and a textbox to display the input and output.

05). Add in the operations of the calculator with validations.

You can add validations to ensure that only integer values are entered and handle errors such as division by zero. I've included basic validation in the code above, but you can further enhance it based on your requirements.