Assignment 3

Write a windows application that accepts two inputs (integer values) then performs the following math operations. Addition, Subtraction, Division, Multiplication, Integer Division, Mod, String Concatenation, and the string length of each input and output. Output for each operation needs to have its own notification area (textbox) with their readonly properties set to true. I'd also like a event window at the bottom displaying the event as they take place.

Things (controls) we may need.

- Main Form
  - Input (textbox(s))
    - properties
      - name set to txtInput[1|2]
      - readonly set to false
  - Output (textbox(s) or labels)
    - name set to txtOutput[Add|Sub|Mul|Div|Int|Mod|Concat]
    - properties
      - readonly set to true
  - Labels
  - Button to initiate the operations
    - properties
      - name set to btnOperate
      - text set to "Operate"
  - Variables to hold the input values and output values
    - Dim Input[1|2] As String
    - Dim Output[Add|Sub|Mul|Div|Int|Mod|Concat] As Double
- Methods and/or Functions
  - CInt() (what is it and what does it do? And WHY?)
  - CStr() or Output[Add|Sub|Mul|Div|Int|Mod].ToString()
  - Math Functions
    - + [example (result = num1 + num2)]
    - - [example (result = num1 - num2)]
    - * [example (result = num1 * num2)]
    - / [example (result = num1 / num2)]
    - \ [example (result = num1 \ num2)]
      - But we just did division with /, what does THIS thang do?
    - Mod [example (num1 Mod num2)]
      - Who is this guy and what's he good for?
    - & (example (result = str1 & str2)]

- Ummmm, why is this in here? Easy! *Its being used to display the difference between [Numbers and Strings](#) and yes you are correct, this isn't a math function*.
  - Input value retrieval (txtInput[1|2].Text)
    - What datatype does this return? Why? How do we work with this datatype?
- Other Required Knowledge
  - These variable things you speak of, do they have a default value? Yes they do!
    - Numbers default to 0
    - Strings default to Nothing. Be careful, Nothing is not the same as an empty string "".
  - [Unintended side effects](#).
    - Say what?
  - [Division by zero](#) (scroll down to "*Attempted Division by Zero*") What happens when you divide by zero in visual basic? What happens in other languages?

There, now (providing there is time) that we have that complete lets make a few changes to our program. Lets remove that blasted button and automate this thing.

- Now how do you expect us to do that? HUH?
  - Well first we need to remove the button. (*select the control and push the delete key*). Ummmm, I think we broke something.
    - Visual Basic didn't remove my event handler for my blasted button, now what? (*very carefully select the subroutine (AND JUST THAT SUBROUTINE), then poke the delete key*)
  - Ok wise guy how do we do our calculations now?
    - EVENT HANDLERS!