



Sub Procedures, Part II (Continue)



Local Variable

- A variable declared inside a Sub procedure with a Dim statement
- Space reserved in memory for that variable until the End Sub – then the variable ceases to exist



Local Variables

```
Private Sub btnOne_Click(...) Handles btnOne_Click
    Dim num As Integer = 4
    SetFive()
    txtBox.Text = CStr(num)
End Sub
```

```
Sub SetFive()
    Dim num As Integer = 5
End Sub
```

Output: 4



Class-Level Variables

- Visible to every procedure in a form's code without being passed
- Dim statements for class-level variables are placed
 - Outside all procedures
 - At the top of the program region



Class-Level Variables

```
Dim num As Integer = 4
```

```
Private Sub btnOne_Click(...) Handles btnOne_Click  
    txtBox.Text = CStr(num)  
    SetFive()  
    txtBox.Text = CStr(num)  
End Sub
```

```
Sub SetFive()  
    num = 5  
End Sub
```

Output: 5



Scope

- The **scope** of a variable is the portion of the program that can refer to it.



Scope

- Class-level variables have **class-level scope** and are available to all procedures in the class.
- Variables declared inside a procedure have **local scope** and are only available to the procedure in which they are declared.