Function Procedures (Continue I)

Lab Sheet 4.7: Code

```vb
Private Sub btnCalculate_Click(...) _
                        Handles btnCalculate.Click
    Dim a, b As Double
    a = CDbl(txtSideOne.Text)
    b = CDbl(txtSideTwo.Text)
    txtHyp.Text = CStr(Hypotenuse(a, b))
End Sub


Function Hypotenuse(ByVal a As Double, _
                    ByVal b As Double) As Double
    Return Math.Sqrt(a ^ 2 + b ^ 2)
End Function
```

Example: Form

Right Triangle

Length of one side ⟵ txtSideOne

Length of other side ⟵ txtSideTwo

Calculate Hypotenuse

Length of Hypotenuse ⟵ txtHyp

Comparing Function Procedures with Sub Procedures

- Subs are accessed using a call statement

- Functions are called where you would expect to find a literal or expression

- For example:
  - result = *functionCall*
  - lstBox.Items.Add (*functionCall*)

Functions vs. Procedures

- Both can perform similar tasks

- Both can call other subs and functions

- Use a function when you want to return one and only one value