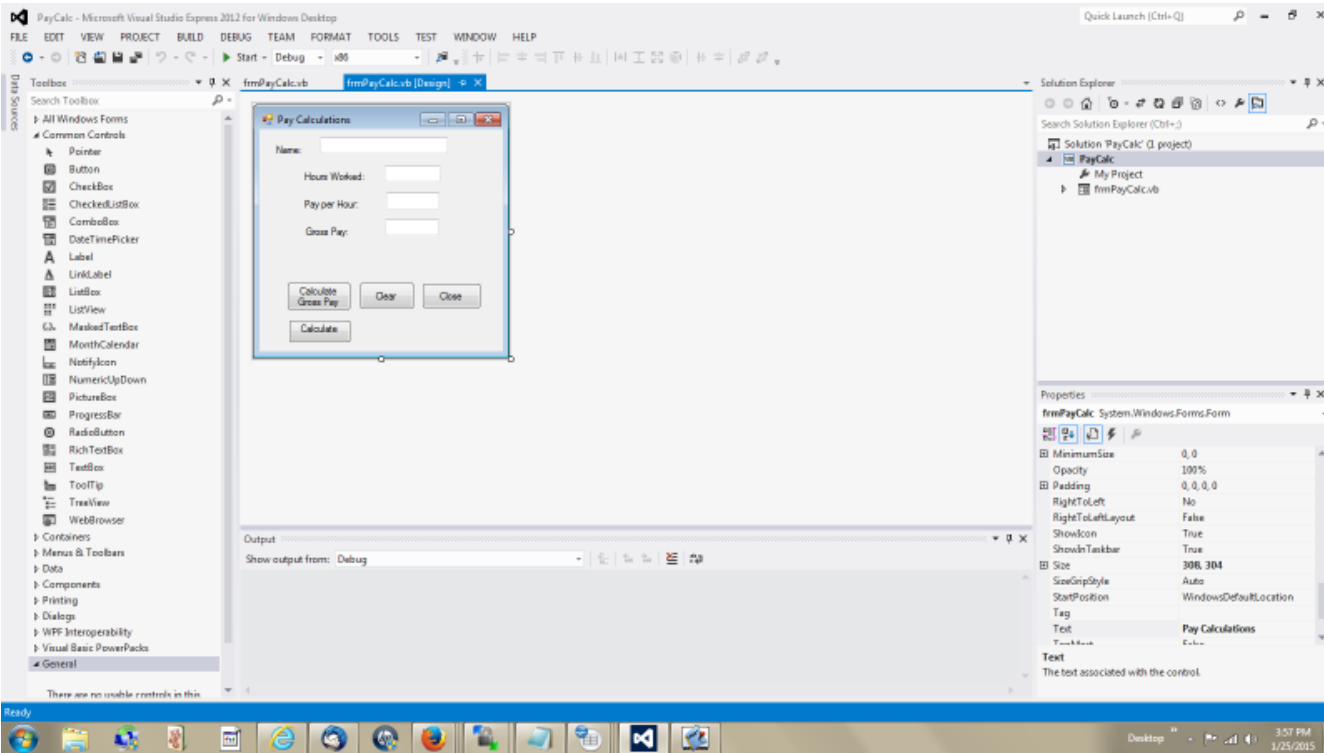
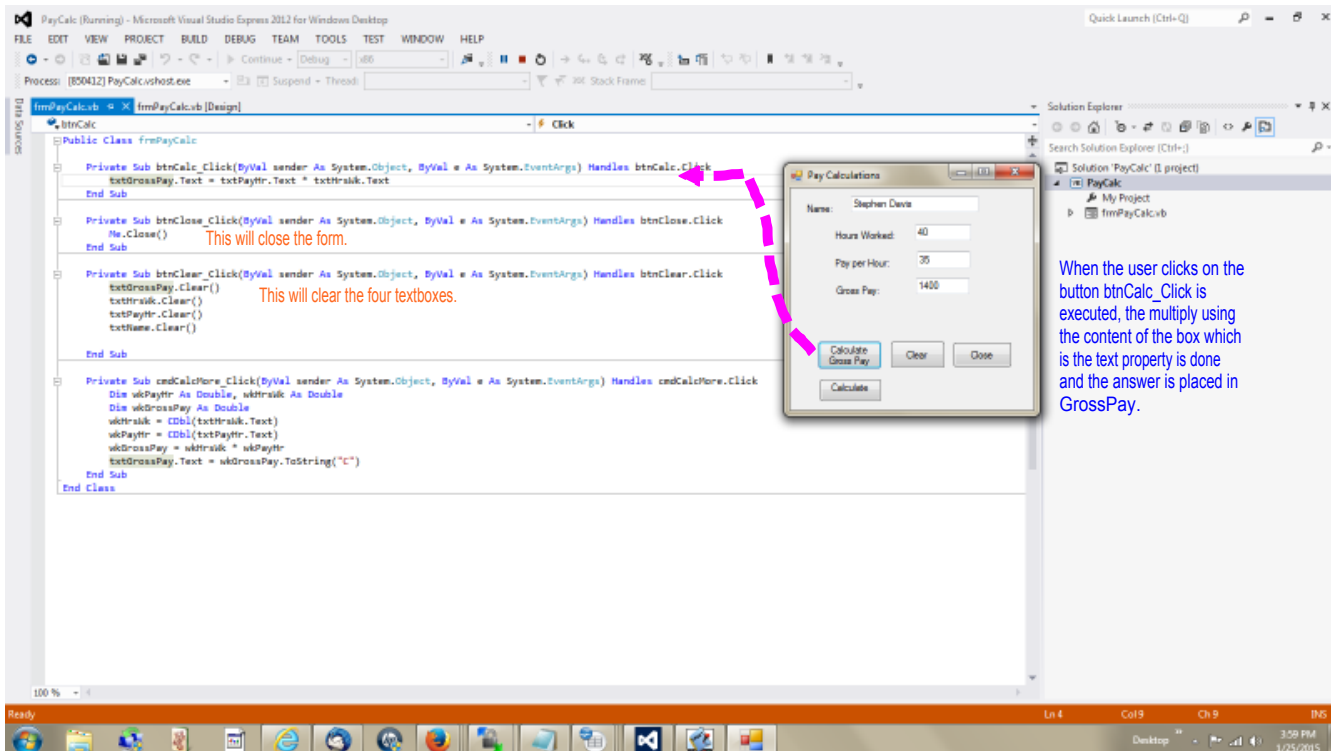






PayCalc (Running) - Microsoft Visual Studio Express 2012 for Windows Desktop

FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST WINDOW HELP

Process: [800412] PayCalcVshost.exe

frmPayCalc.vb

```
Public Class frmPayCalc

    Private Sub btnCalc_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnCalc.Click
        txtGrossPay.Text = txtPaytr.Text * txtHrsk.Text
    End Sub

    Private Sub btnClose_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnClose.Click
        Me.Close()
    End Sub

    Private Sub btnClear_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnClear.Click
        txtGrossPay.Clear()
        txtHrsk.Clear()
        txtPaytr.Clear()
        txtName.Clear()
    End Sub

    Private Sub cmdCalcMore_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles cmdCalcMore.Click
        Dim wkPaytr As Double, wkHrsk As Double
        Dim wkGrossPay As Double
        wkHrsk = CDbl(txtHrsk.Text)
        wkPaytr = CDbl(txtPaytr.Text)
        wkGrossPay = wkHrsk * wkPaytr
        txtGrossPay.Text = wkGrossPay.ToString("C")
    End Sub

End Class
```

Pay Calculations

Name: Stephen Davis

Hours Worked: 40

Pay per Hour: 35

Gross Pay: 1400

Calculate Gross Pay Clear Close

Calculate

When the user clicks on the button btnCalc_Click is executed, the multiply using the content of the box which is the text property is done and the answer is placed in GrossPay.

Public Class frmPayCalc

Private Sub btnCalc_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnCalc.Click

txtGrossPay.Text = txtPayHr.Text * txtHrsWk.Text

End Sub

Private Sub btnClose_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnClose.Click

Me.Close()

End Sub

Private Sub btnClear_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnClear.Click

txtGrossPay.Clear()

txtHrsWk.Clear()

txtPayHr.Clear()

txtName.Clear()

End Sub

Private Sub cmdCalcMore_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles cmdCalcMore.Click

Dim wkPayHr As Double, wkHrsWk As Double

Dim wkGrossPay As Double

wkHrsWk = CDbl(txtHrsWk.Text)

wkPayHr = CDbl(txtPayHr.Text)

wkGrossPay = wkHrsWk * wkPayHr

txtGrossPay.Text = wkGrossPay.ToString("c")

End Sub

End Class

Pay Calculations

Name: Jennifer Jones

Hours Worked: 40

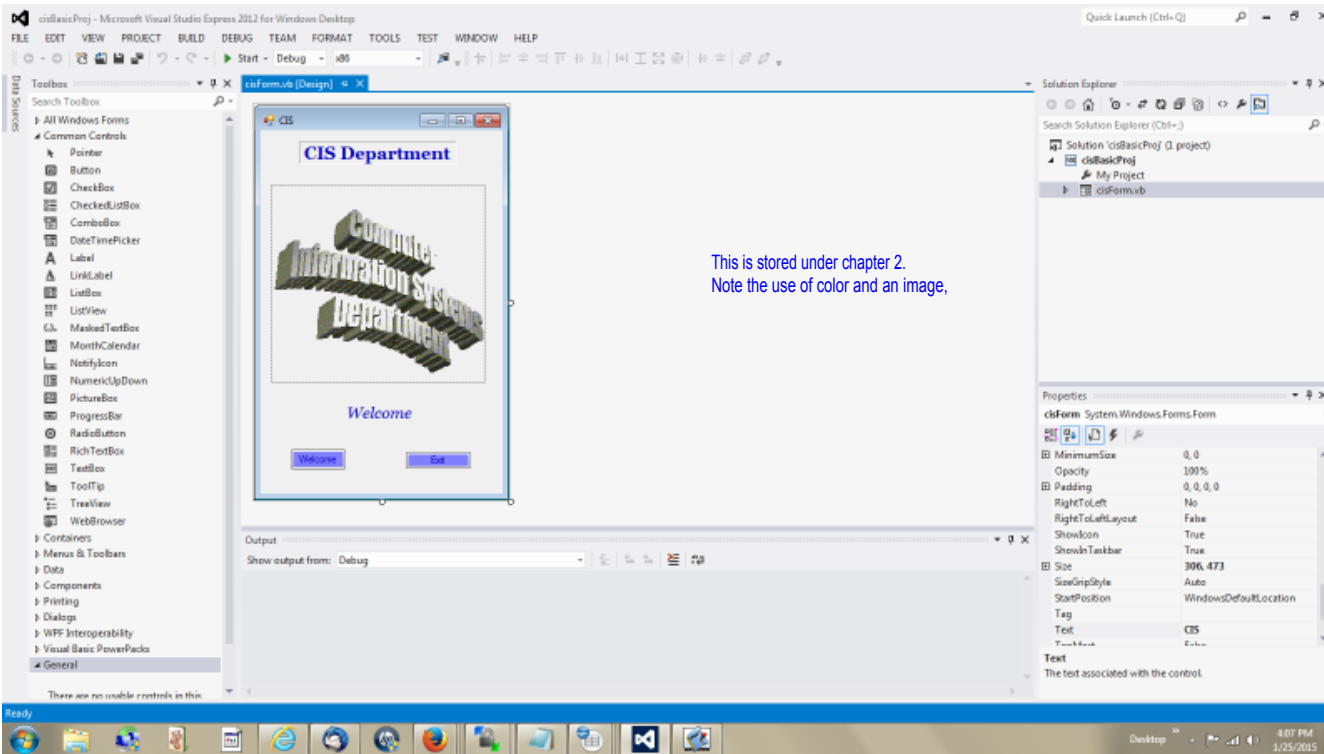
Pay per Hour: 35

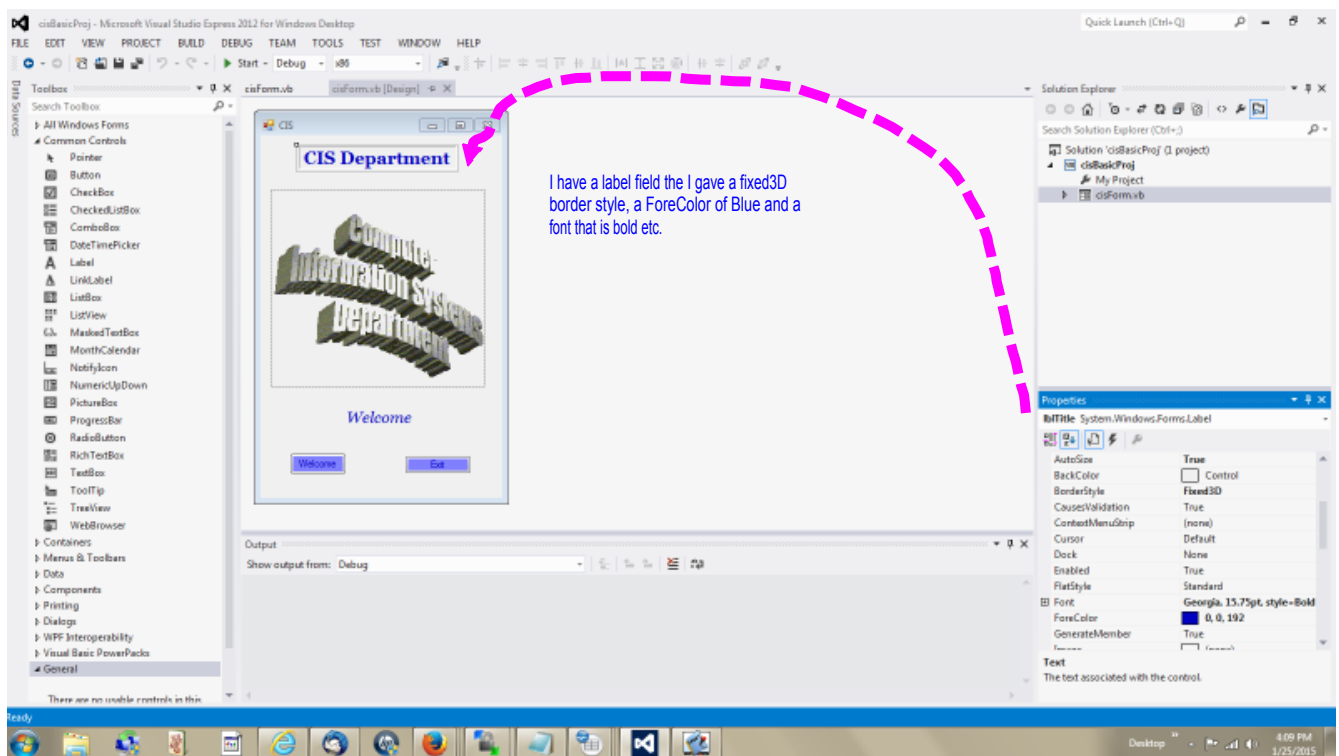
Gross Pay: \$1,400.00

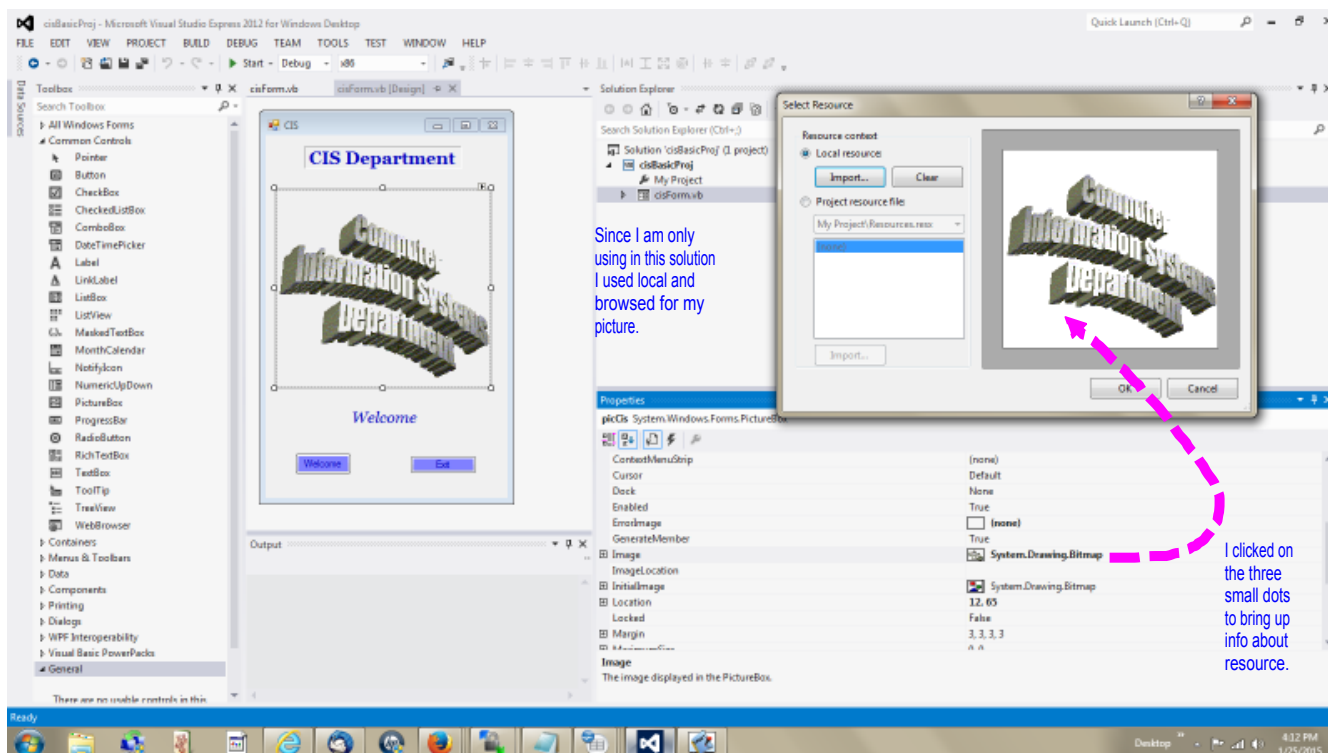
Calculate Gross Pay Clear Close

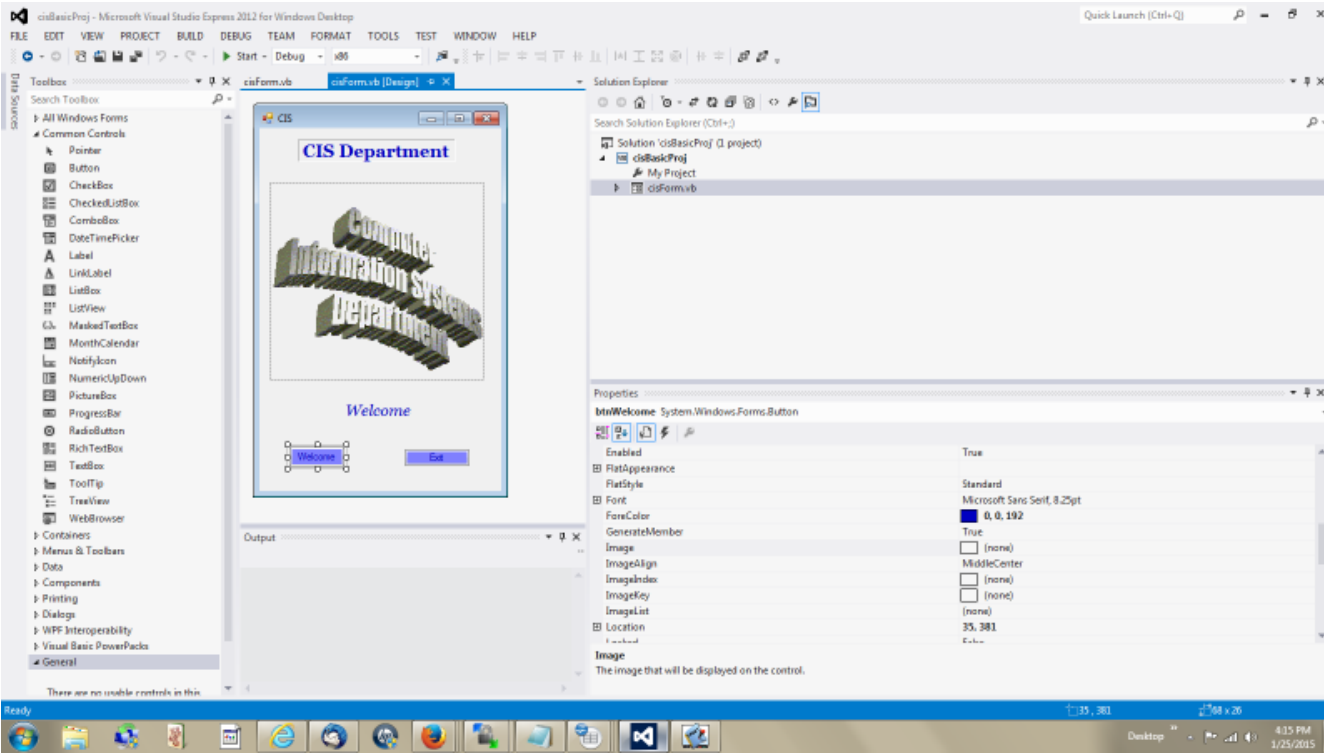
Calculate

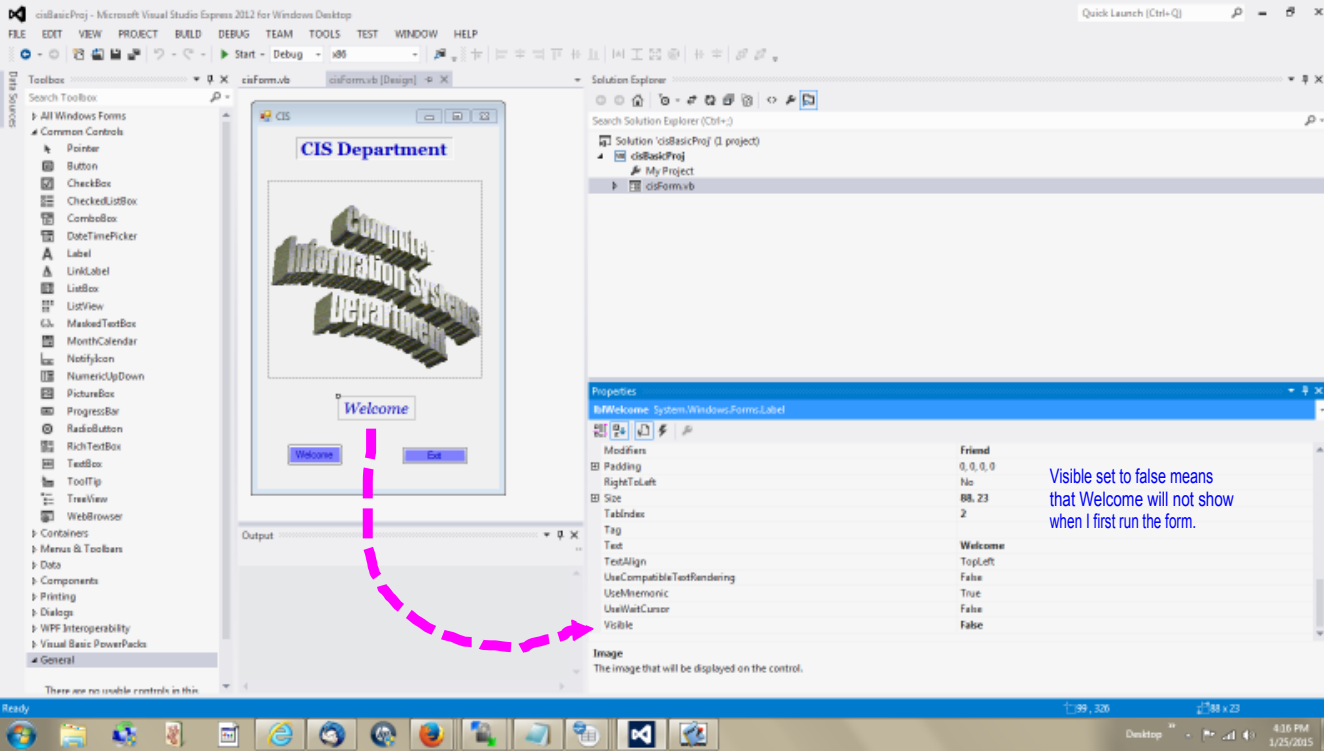
I am setting up three variables to use in calculations.
I then convert txtHrsWk to CDbl a numeric and put the content into wkHrsWk and then I do the same with txtPayHr. Next I multiply the two variables together and store the result in a third variable.
Then I convert the result to string and make it currency before I store it in the textbox set up to receive the answer.

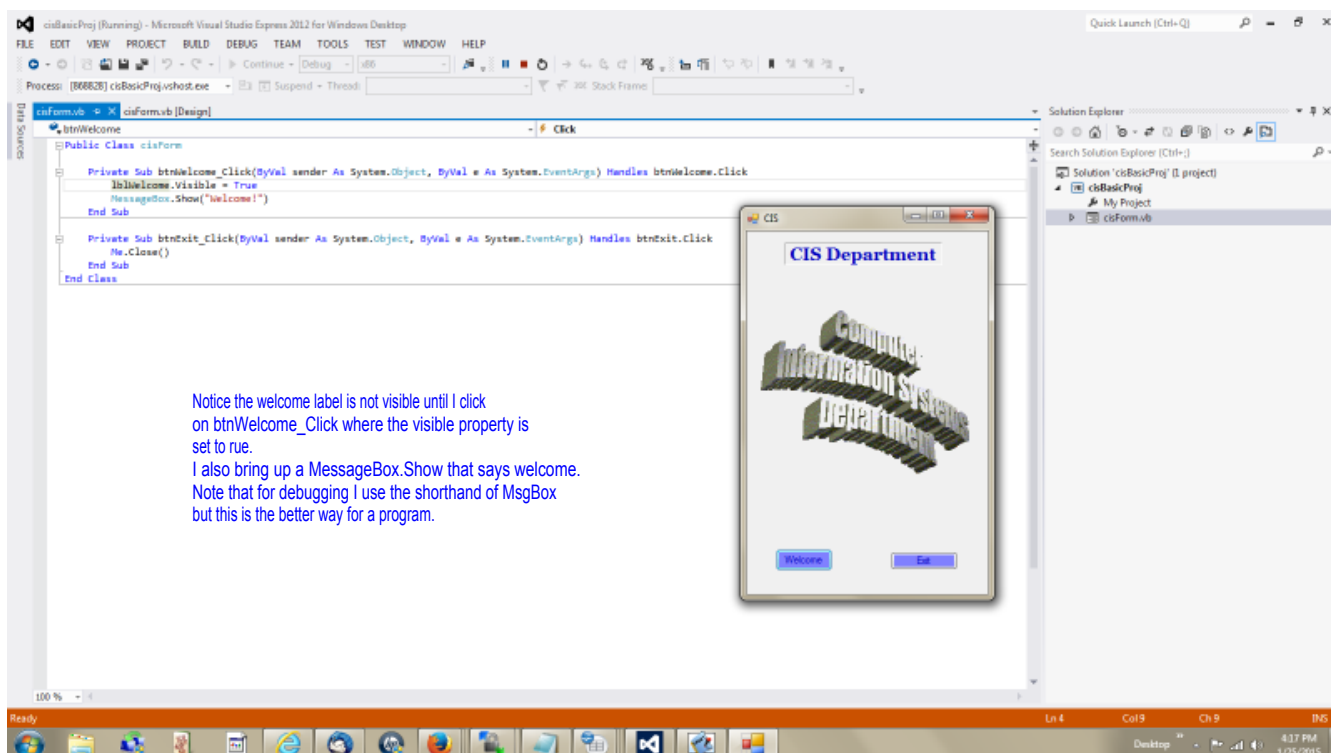


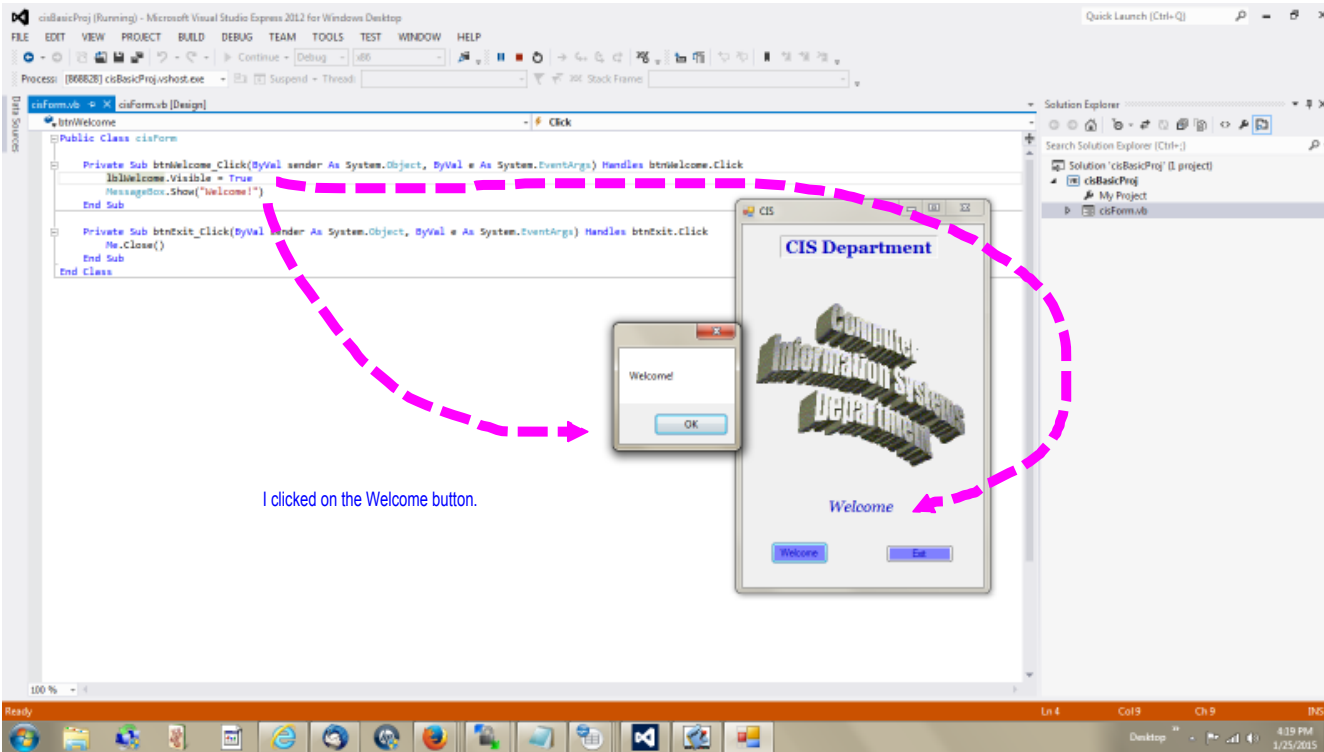


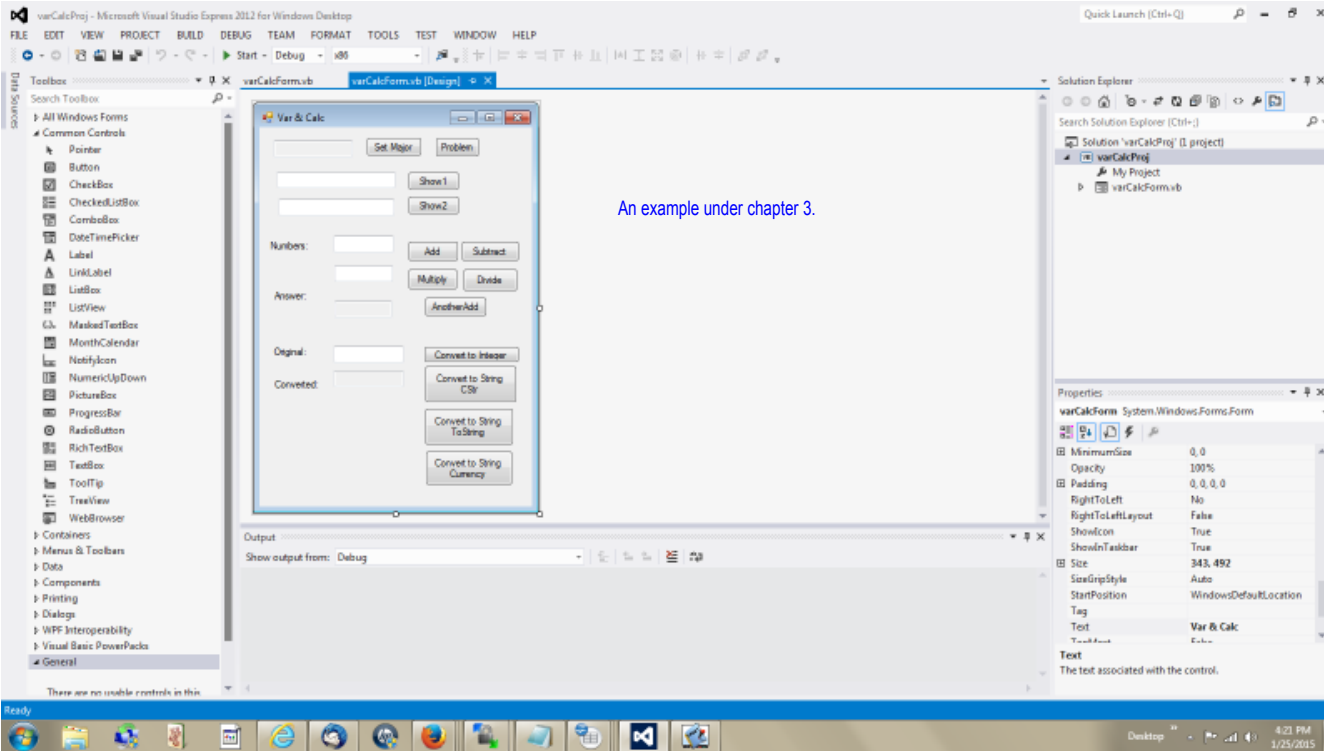












An example under chapter 3.

Global variable available to all subroutines. Defined locally only available where defined.

Setting up an empty string var and following book guidelines of starting with str. Displaying empty and then resetting.

Problem: strMajor not declared.

Global variable can be used multiple places.

With add convert to numeric - confusion with concatenate.

```

Public Class varCalcForm
    Dim gvOption As String
    'Class level variable (also called global sometimes)
    Private Sub btnMajor_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnMajor.Click
        Dim strMajor As String = String.Empty
        txtMajor.Text = strMajor
        MessageBox.Show(strMajor)
        strMajor = "CIS"
        txtMajor.Text = strMajor
        MessageBox.Show(strMajor)
    End Sub

    Private Sub btnProb_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnProb.Click
        'strMajor = "Computer Info Sys"
        'txtMajor.Text = strMajor
        'remove the quotes to see the problem, now they are commented out
    End Sub

    Private Sub btnShow1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnShow1.Click
        gvOption = "Programming"
        txtShow1.Text = gvOption
    End Sub

    Private Sub btnShow2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnShow2.Click
        gvOption = "Networking"
        txtShow2.Text = gvOption
    End Sub

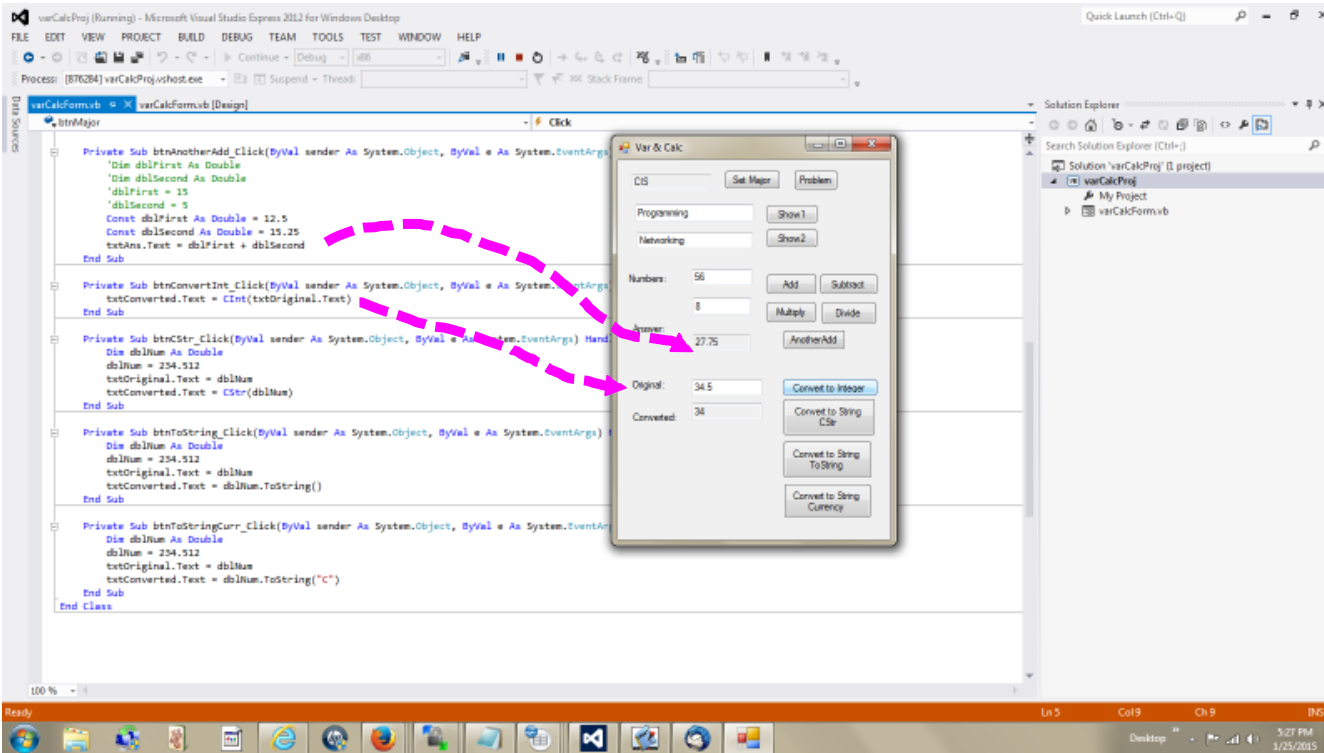
    Private Sub btnAdd_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnAdd.Click
        txtAns.Text = Cdbl(txtFirstNum.Text) + Cdbl(txtSecondNum.Text)
    End Sub

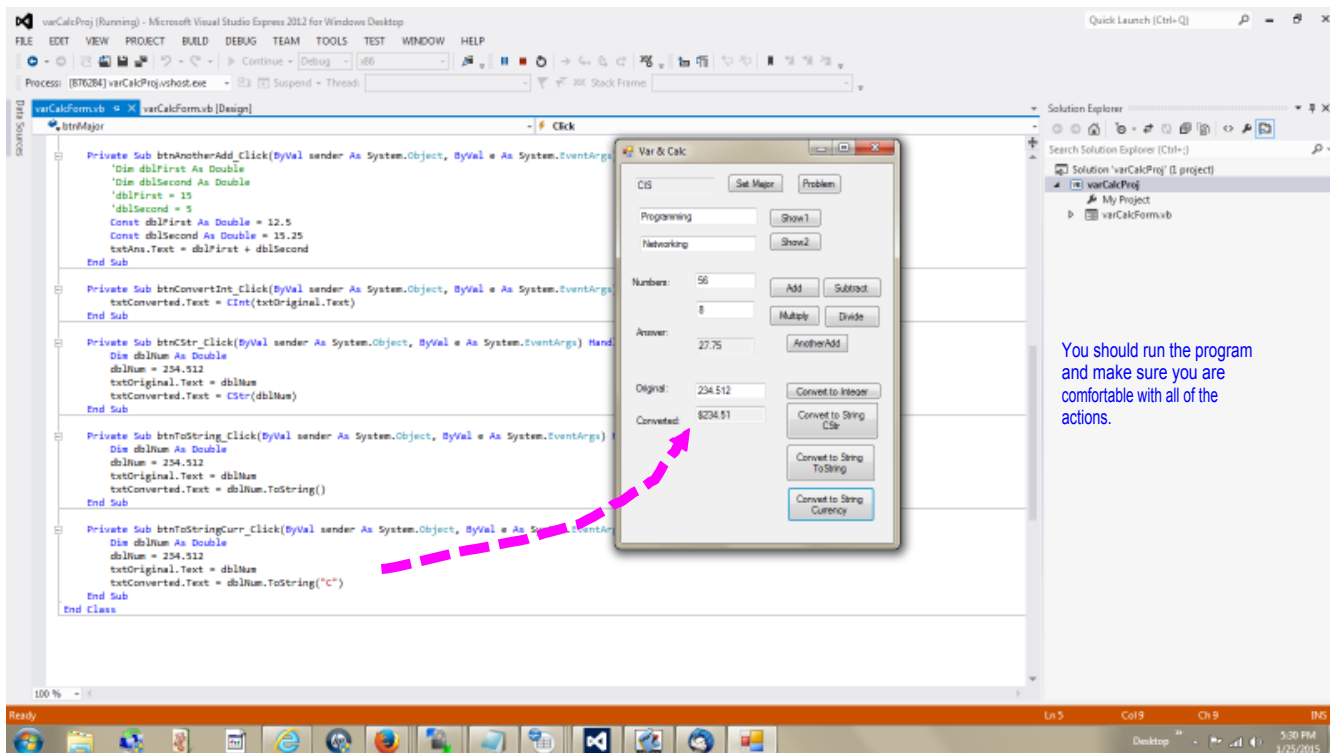
    Private Sub btnSubt_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnSubt.Click
        txtAns.Text = txtFirstNum.Text - txtSecondNum.Text
    End Sub

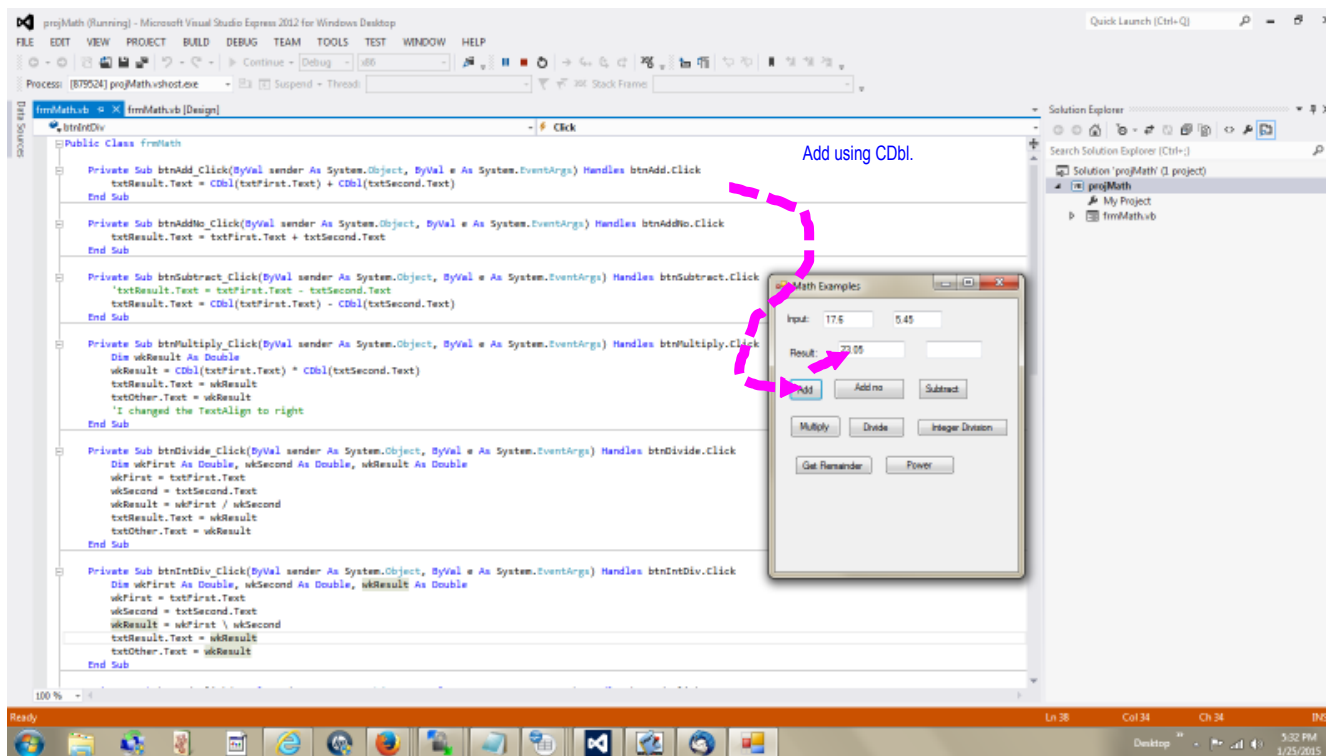
    Private Sub btnMult_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnMult.Click
        txtAns.Text = txtFirstNum.Text * txtSecondNum.Text
    End Sub

    Private Sub btnDiv_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnDiv.Click
        txtAns.Text = txtFirstNum.Text / txtSecondNum.Text
    End Sub
End Class

```







projMath (running) - Microsoft Visual Studio Express 2012 for Windows Desktop

FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST WINDOW HELP

Process: [879024] projMathvshost.exe

frmMath.vb [Design]

```
Public Class frmMath

    Private Sub btnAdd_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnAdd.Click
        txtResult.Text = CDbl(txtFirst.Text) + CDbl(txtSecond.Text)
    End Sub

    Private Sub btnAddMo_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnAddMo.Click
        txtResult.Text = txtFirst.Text + txtSecond.Text
    End Sub

    Private Sub btnSubtract_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnSubtract.Click
        txtResult.Text = txtFirst.Text - txtSecond.Text
        txtResult.Text = CDbl(txtFirst.Text) - CDbl(txtSecond.Text)
    End Sub

    Private Sub btnMultiply_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnMultiply.Click
        Dim wkResult As Double
        wkResult = CDbl(txtFirst.Text) * CDbl(txtSecond.Text)
        txtResult.Text = wkResult
        txtOther.Text = wkResult
        'I changed the TextAlign to right
    End Sub

    Private Sub btnDivide_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnDivide.Click
        Dim wkFirst As Double, wkSecond As Double, wkResult As Double
        wkFirst = txtFirst.Text
        wkSecond = txtSecond.Text
        wkResult = wkFirst / wkSecond
        txtResult.Text = wkResult
        txtOther.Text = wkResult
    End Sub

    Private Sub btnIntDiv_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnIntDiv.Click
        Dim wkFirst As Double, wkSecond As Double, wkResult As Double
        wkFirst = txtFirst.Text
        wkSecond = txtSecond.Text
        wkResult = wkFirst \ wkSecond
        txtResult.Text = wkResult
        txtOther.Text = wkResult
    End Sub

End Class
```

Math Examples

Input: 17.6 5.45

Result: 17.6545

Add AddMo Subtract

Multiply Divide Integer Division

Get Remainder Power

Just a plus done on data in text boxes with default string type so concatenated.

The screenshot displays the Microsoft Visual Studio Express 2012 IDE. The main window shows the code for `frmMath.vb`, which is a public class with several event handlers for buttons: `btnAdd_Click`, `btnAddMo_Click`, `btnSubtract_Click`, `btnMultiply_Click`, `btnDivide_Click`, and `btnIntDiv_Click`. The `btnIntDiv_Click` method is highlighted, showing the calculation of integer division using the backslash operator (`\`).

Overlaid on the code is a small application window titled "Math Examples". It has two input fields with values "17.5" and "5.45". Below the inputs are buttons for "Add", "Add no", "Subtract", "Multiply", "Divide", "Integer Division", "Get Remainder", and "Power". The "Integer Division" button is highlighted, and the "Result" field shows the value "3".

A pink dashed arrow points from the `Integer Division` button in the application window to the `Integer division using \` line in the code. A blue text label "Returns an integer result." is positioned next to the arrow.

```
Public Class frmMath

    Private Sub btnAdd_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnAdd.Click
        txtResult.Text = CDbl(txtFirst.Text) + CDbl(txtSecond.Text)
    End Sub

    Private Sub btnAddMo_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnAddMo.Click
        txtResult.Text = txtFirst.Text + txtSecond.Text
    End Sub

    Private Sub btnSubtract_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnSubtract.Click
        txtResult.Text = txtFirst.Text - txtSecond.Text
        txtResult.Text = CDbl(txtFirst.Text) - CDbl(txtSecond.Text)
    End Sub

    Private Sub btnMultiply_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnMultiply.Click
        Dim wkResult As Double
        wkResult = CDbl(txtFirst.Text) * CDbl(txtSecond.Text)
        txtResult.Text = wkResult
        txtOther.Text = wkResult
        'I changed the TextAlign to right
    End Sub

    Private Sub btnDivide_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnDivide.Click
        Dim wkFirst As Double, wkSecond As Double, wkResult As Double
        wkFirst = txtFirst.Text
        wkSecond = txtSecond.Text
        wkResult = wkFirst / wkSecond
        txtResult.Text = wkResult
        txtOther.Text = wkResult
    End Sub

    Private Sub btnIntDiv_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnIntDiv.Click
        Dim wkFirst As Double, wkSecond As Double, wkResult As Double
        wkFirst = txtFirst.Text
        wkSecond = txtSecond.Text
        wkResult = wkFirst \ wkSecond
        txtResult.Text = wkResult
        txtOther.Text = wkResult
    End Sub

End Class
```

projMath (Running) - Microsoft Visual Studio Express 2012 for Windows Desktop

FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST WINDOW HELP

Process: (879524) projMath.vshost.exe

frmMathDiv [Design]

```
Private Sub btnIntDiv_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnIntDiv.Click
    Dim wkFirst As Double, wkSecond As Double, wkResult As Double
    wkFirst = txtFirst.Text
    wkSecond = txtSecond.Text
    wkResult = wkFirst \ wkSecond
    txtResult.Text = wkResult
    txtOther.Text = wkResult
End Sub

Private Sub btnMod_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnMod.Click
    Dim wkFirst As Double, wkSecond As Double, wkResult As Double
    wkFirst = txtFirst.Text
    wkSecond = txtSecond.Text
    wkResult = wkFirst Mod wkSecond
    txtResult.Text = wkResult
    txtOther.Text = wkResult
End Sub

Private Sub btnPower_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnPower.Click
    Dim wkFirst As Double, wkSecond As Double, wkResult As Double
    wkFirst = txtFirst.Text
    wkSecond = txtSecond.Text
    wkResult = wkFirst ^ wkSecond
    txtResult.Text = wkResult
    txtOther.Text = wkResult
End Sub
End Class
```

5.45 goes into 17.6 three times with a remainder of 1.25. Using mod gives me that remainder.

Gives me a number to a specified power.

Again, try all these and experiment.

Math Examples

Input: 17.6 5.45

Result: 1.25 1.25

Add Add no Subtract

Multiply Divide Integer Division

Get Remainder Power

Ln 38 Col 34 Ch 34

Ready Desktop 5:38 PM 1/25/2015

