

# COMPUTATIONAL METHODS

## Visual Basic Programming – Demonstration Program 2

```
' scope - demonstrate subroutines, functions, global and local variables
Public Class Form1
    ' global constant
    Const CMPEINCH As Double = 2.54
    ' global variable
    Dim gvar As Double = 0.0
    ' example of a subroutine
    Public Sub PrintVar(name As String, value As Double)
        ListBox1.Items.Add("Variable " & name & " = " & value)
    End Sub
    ' example of a function
    Public Function Convert2Inches(cm As Double) As Double
        Dim inches = cm / CMPEINCH
        Return inches
    End Function
    ' load handler
    Private Sub Form1_Load(sender As System.Object, e As System.EventArgs) Handles
MyBase.Load
        Dim A4width As Double = Convert2Inches(23.5)
        PrintVar("A4width", A4width)
        PrintVar("gvar", gvar)
    End Sub
    ' button 1 handler
    Private Sub Button1_Click(sender As System.Object, e As System.EventArgs)
Handles Button1.Click
        gvar = gvar + 1
        PrintVar("gvar", gvar)
    End Sub
    ' button 2 handler
    Private Sub Button2_Click(sender As System.Object, e As System.EventArgs)
Handles Button2.Click
        gvar = gvar * 2
        PrintVar("gvar", gvar)
    End Sub
End Class
```

