



```
Public Class Form1
```

```
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As  
System.EventArgs) Handles Button1.Click
```

```
        Dim x As String, y As Integer, z As String = " "
```

```
        x = TextBox1.Text
```

```
        y = Len(x)
```

```
        For i As Integer = y To 1 Step -1
```

```
            z = z & Mid(x, i, 1)
```

```
        Next
```

```
        ListBox1.Items.Add(z)
```

```
    End Sub
```

```
    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As  
System.EventArgs) Handles Button2.Click
```

```
        End
```

```
    End Sub
```

```
End Class
```

The screenshot shows a Windows application window titled "Lab 6" with a title bar containing standard minimize, maximize, and close buttons. The main content area has a light beige background and is titled "Series Approximation of Sine(x)". It features two input fields: "x =" with the value "1" and "n =" with the value "4". Below these are three output fields: "Series Approximation" showing "0.841471009700176", "Correct Value" showing "0.841470984807897", and "Error" showing "-2.95818636095578E-08". At the bottom, there are two buttons: "Approximate" and "Stop".

```
Public Class Form1
```

```
    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
```

```
        Dim n As Integer
```

```
        Dim x, sinx, actualsinx, approx_error As Double
```

```
        x = TextBox1.Text
```

```
        n = TextBox2.Text
```

```
        sinx = 0
```

```
        For i As Integer = 0 To n
```

```
            sinx = sinx + ((-1) ^ i) * ((x ^ (2 * i + 1)) /
(factorial(2 * i + 1)))
```

```
        Next
```

```
        actualsinx = Math.Sin(x)
```

```
        approx_error = (actualsinx - sinx) / actualsinx
```

```
        TextBox3.Text = sinx
```

```
        TextBox4.Text = actualsinx
```

```
        TextBox5.Text = approx_error
```

```
End Sub
```

```
'this function calculates the factorial
```

```
Function factorial(ByVal x As Integer) As Double
```

```
    Dim product As Double
```

```
product = 1
For i As Integer = 1 To x
    product = product * i
Next
Return product

End Function

Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
    End
End Sub
End Class
```



