James DuBois


```vb
Public Class Form1
    Const ARRAY_SIZE = 10 ' This is just a constant so it keeps us safer from trying to
access and index out of bounds or try adding another element when we only want 10
    Dim numbers(ARRAY_SIZE - 1) As Integer
    Dim numberString As String = ""
    Dim valid As Boolean = True

    Private Sub btnInput_Click(sender As Object, e As EventArgs) Handles
buttonInput.Click
        listInputValues.Items.Add("List Input Values")
        LoopInputData()
        For x = 0 To (ARRAY_SIZE - 1)
            listInputValues.Items.Add(CStr(numbers(x)))
        Next
    End Sub

    Private Sub btnDisplayMinAndMax_Click(sender As Object, e As EventArgs) Handles
btnDisplayMinMax.Click
        lblSmallest.Text = ("The smallest number is " & CStr(smallestNumber()))
        lblSmallest.Visible = True
        lblLargest.Text = ("The largest number is " & CStr(largestNumber()))
        lblLargest.Visible = True
    End Sub

    Private Sub btnClear_Click(sender As Object, e As EventArgs) Handles btnClear.Click
        listInputValues.Items.Clear()
        lblLargest.Text = ""
        lblSmallest.Text = ""
    End Sub


    Sub LoopInputData()

        For x = 0 To (ARRAY_SIZE - 1)
            Do
                valid = True
                numberString = InputBox("Enter an integer value")
                If IsNumeric(numberString) Then
                    numbers(x) = CInt(numberString)
                    valid = True
                Else
                    MessageBox.Show("You did not enter a numeric value.  Please try
again.")
                    valid = False
                End If
            Loop Until valid = True
        Next
    End Sub

    Function largestNumber() As Integer
        Dim largest As Integer = numbers(0)
        For x = 1 To (ARRAY_SIZE - 1)
            If (numbers(x) > largest) Then
                largest = numbers(x)
            End If
        Next
        Return largest
```
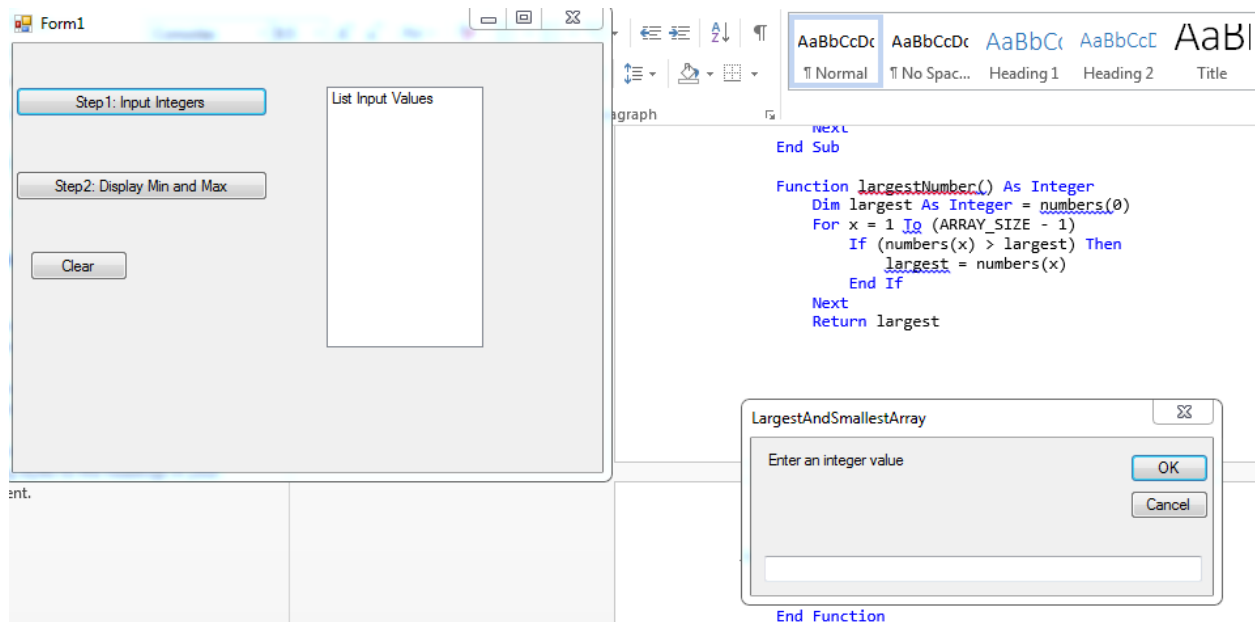
```
        End Function

        Function smallestNumber() As Integer
            Dim smallest As Integer = numbers(0)
            For x = 1 To (ARRAY_SIZE - 1)
                If (numbers(x) < smallest) Then
                    smallest = numbers(x)
                End If
            Next
            Return smallest
        End Function
End Class
```



```
            Next
        End Sub

        Function largestNumber() As Integer
            Dim largest As Integer = numbers(0)
            For x = 1 To (ARRAY_SIZE - 1)
                If (numbers(x) > largest) Then
                    largest = numbers(x)
                End If
            Next
            Return largest
```

```
        End Function
```

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Form1

Step1: Input Integers

Step2: Display Min and Max

Clear

List Input Values
1
2
3
4
5
6
7
8
9
10

Form1

Step1: Input Integers

Step2: Display Min and Max

Clear

List Input Values
1
2
3
4
5
6
7
8
9
10

The smallest number is 1

The largest number is 10