Private Sub primeButton\_Click(sender As Object, e As EventArgs) Handles primeButton.Click

' to calculate and display the prime numbers

'to ensure the list box is clear

displayListBox.Items.Clear()

'to declare the variables and collect the information

Dim firstNumber As Integer

Dim secondNumber As Integer

Dim i, count As Integer

' to collect user info

Call collectNumbers(firstNumber, secondNumber)

If firstNumber = 0 AndAlso secondNumber = 0 Then

displayListBox.Items.Add("There are no prime numbers")

End If

If firstNumber = 0 AndAlso secondNumber = 1 Then

displayListBox.Items.Add("There are no prime numbers")

End If

' makes sure input is ascending

If firstNumber > secondNumber Then

MessageBox.Show("Please make sure the start number is less than the end number", "Error", MessageBoxButtons.OK,

MessageBoxIcon.Exclamation)

End If

' to limit the range to 500

If secondNumber > 500 Then

MessageBox.Show("You may not enter a number higher than 500.", "Limit Reached",

MessageBoxButtons.OK, MessageBoxIcon.Hand)

endNumberTextBox.Focus()

endNumberTextBox.SelectAll()

' to find the prime numbers

Else

For count1 As Integer = firstNumber To secondNumber

For i = 1 To count1

If count1 Mod i = 0 Then

count += 1

End If

Next i

If count = 2 Then

displayListBox.Items.Add(count1 & " is prime")

End If

count = 0

Next count1

'to set proper focus

Call startNumberFocus()

End If

End Sub

Private Sub fibButton\_Click(sender As Object, e As EventArgs) Handles fibButton.Click

' to calculate and display a fibonacci sequence

'to ensure the list box is clear

displayListBox.Items.Clear()

'to declare the variables and collect the information

Dim fibArray(30) As Integer

Dim firstNumber As Integer

Dim fib As Integer

Integer.TryParse(startNumberTextBox.Text, firstNumber)

' to limit the number entered to 30 or below

If firstNumber > 30 Then

MessageBox.Show("You may not enter a number higher than 30.", "Limit Reached",

MessageBoxButtons.OK, MessageBoxIcon.Hand)

endNumberTextBox.Focus()

endNumberTextBox.SelectAll()

' to calculate the fibonacci sequence

Else

fibArray(0) = 0

fibArray(1) = 1

For fib = 2 To firstNumber

fibArray(fib) = fibArray(fib - 1) + fibArray(fib - 2)

Next fib

For fibDisplay As Integer = 0 To fib - 2

displayListBox.Items.Add(fibArray(fibDisplay))

Next

End If

'to set proper focus

Call startNumberFocus()

End Sub