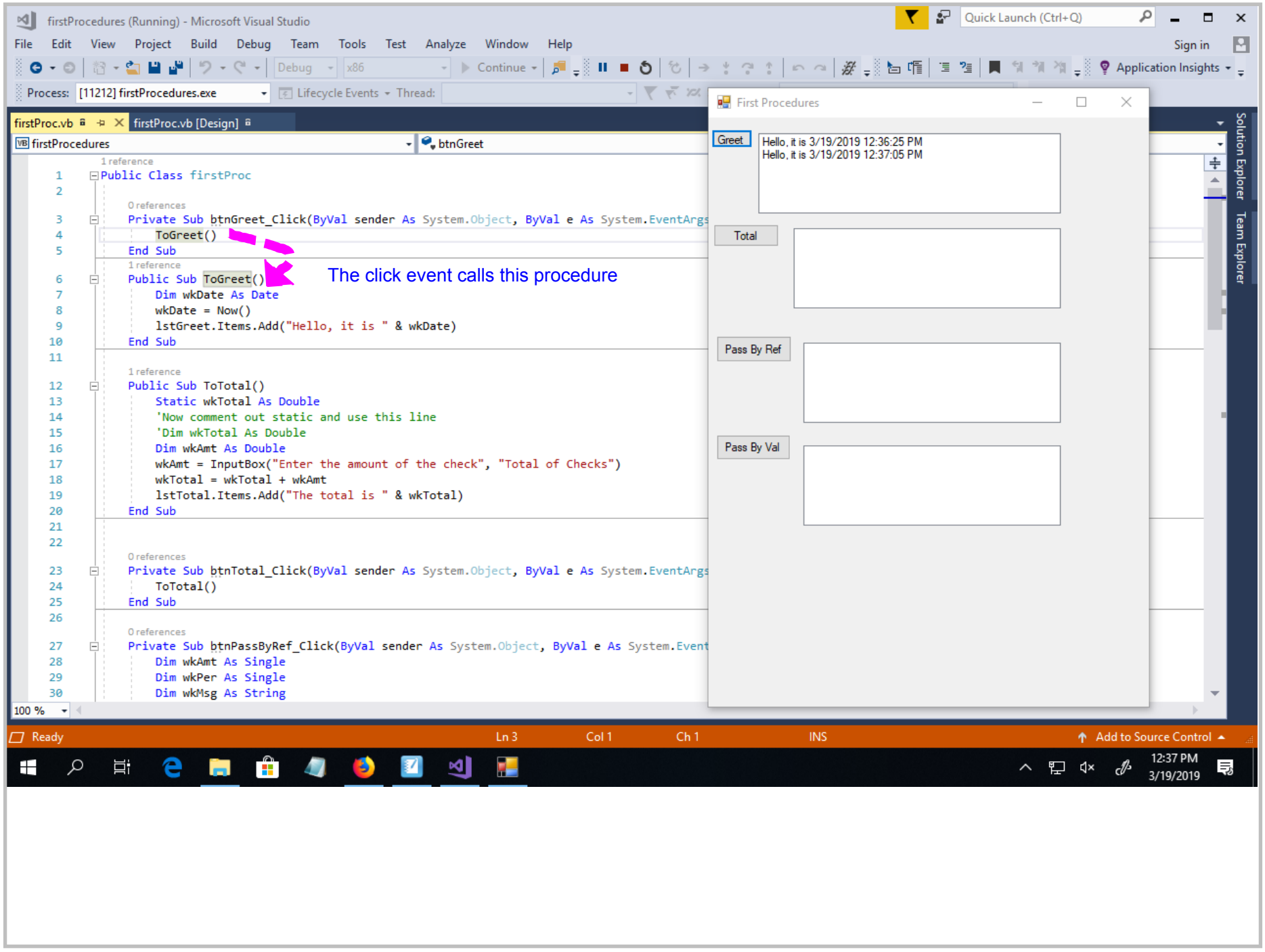
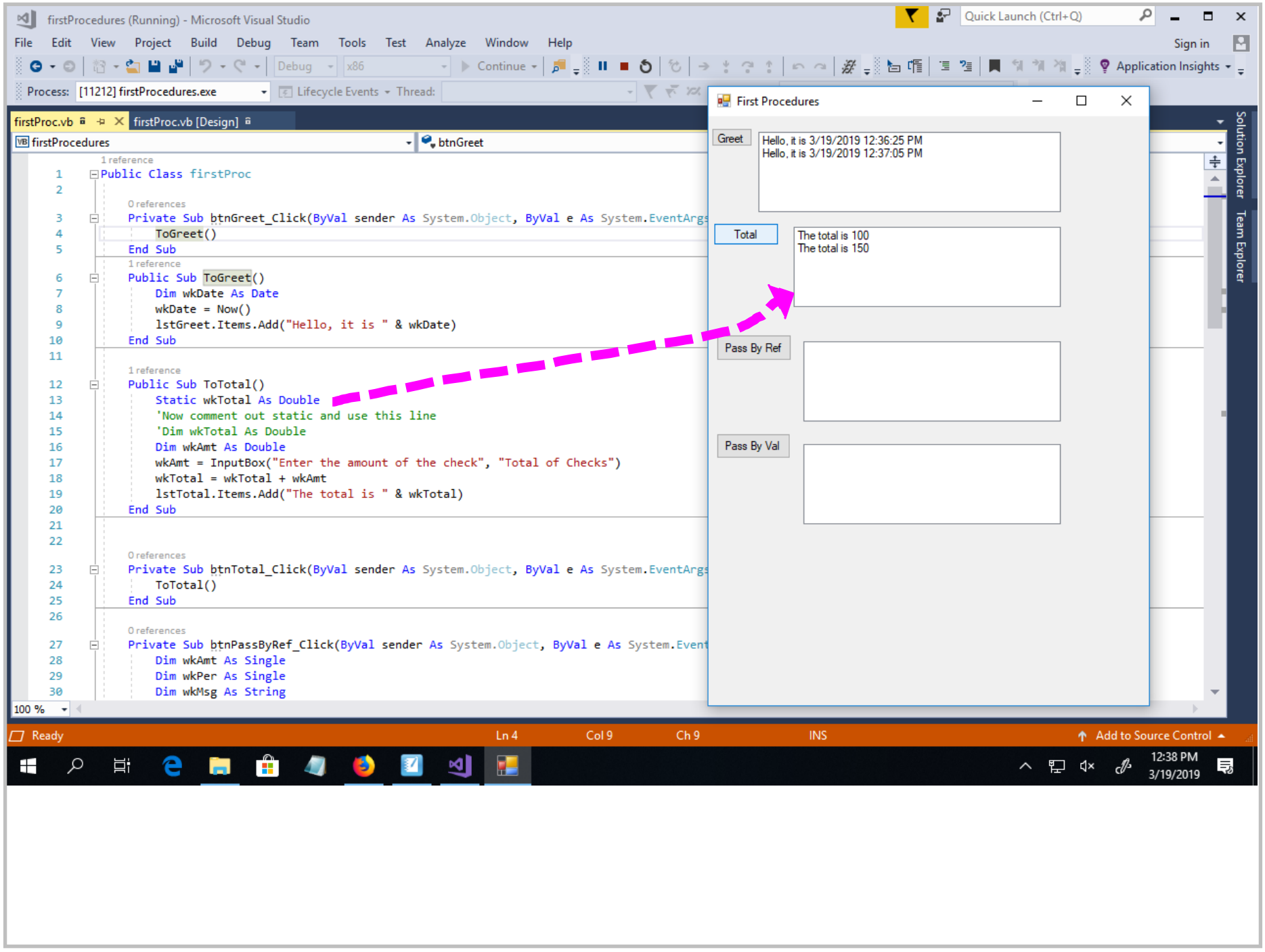
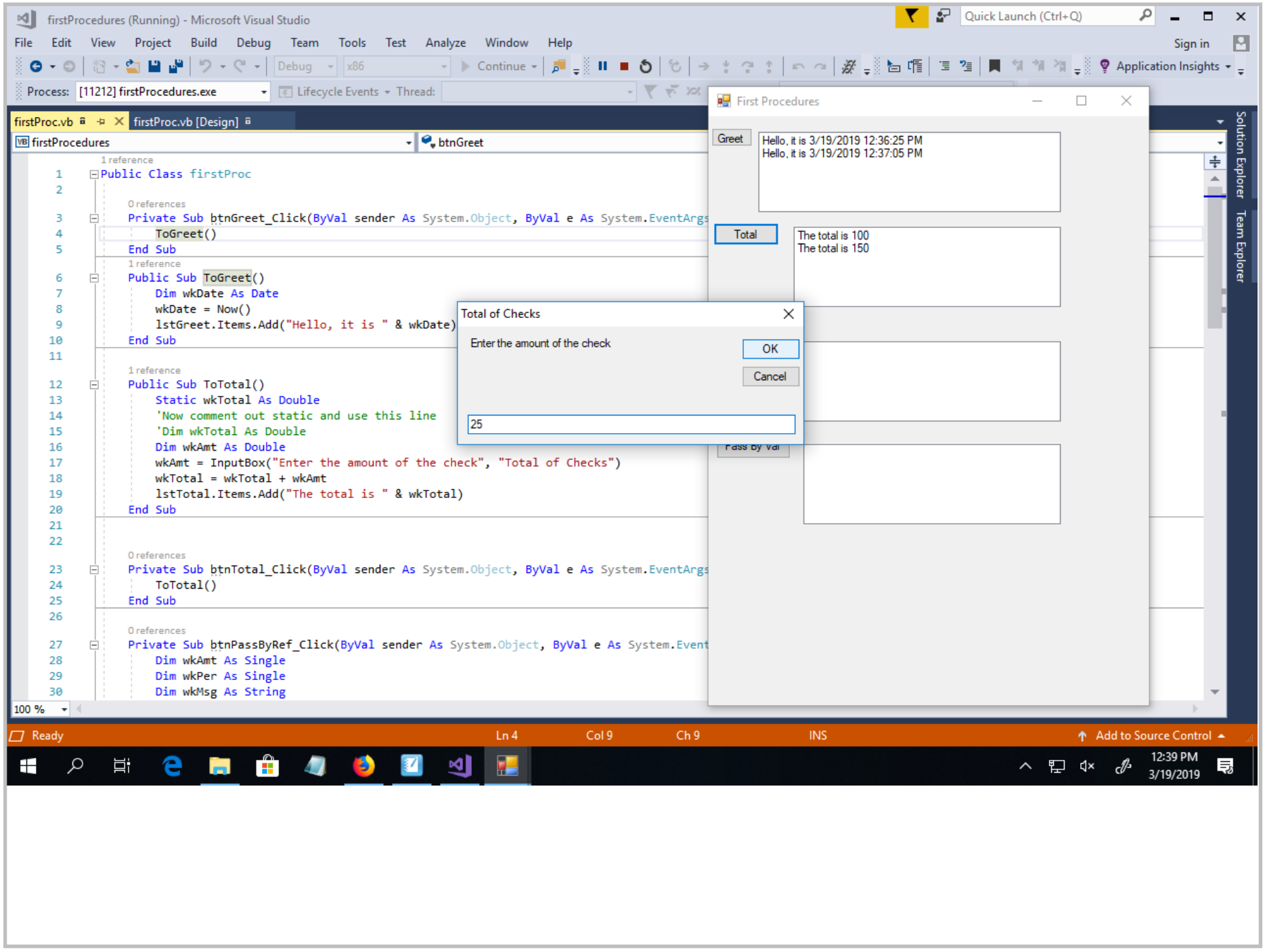
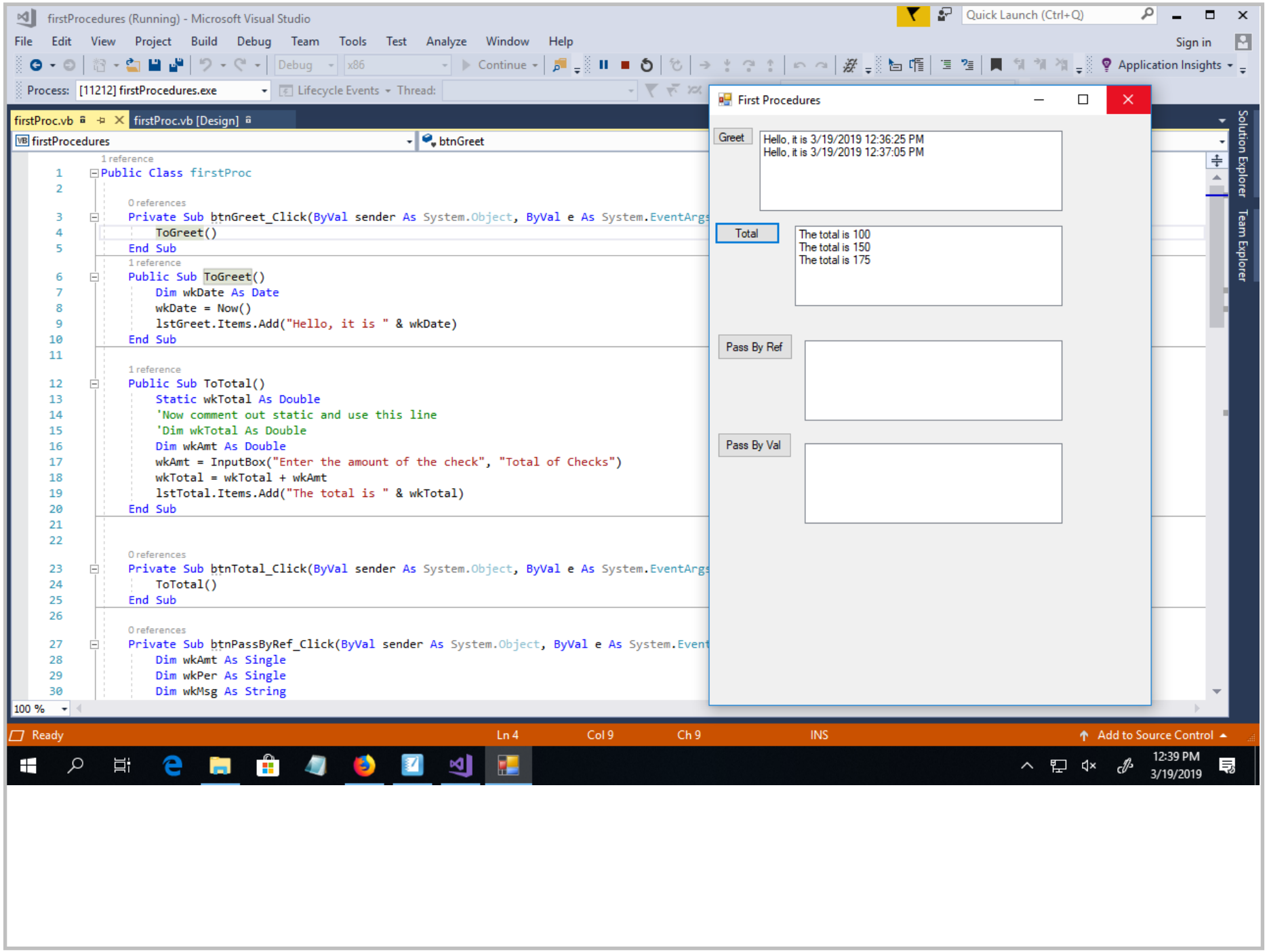
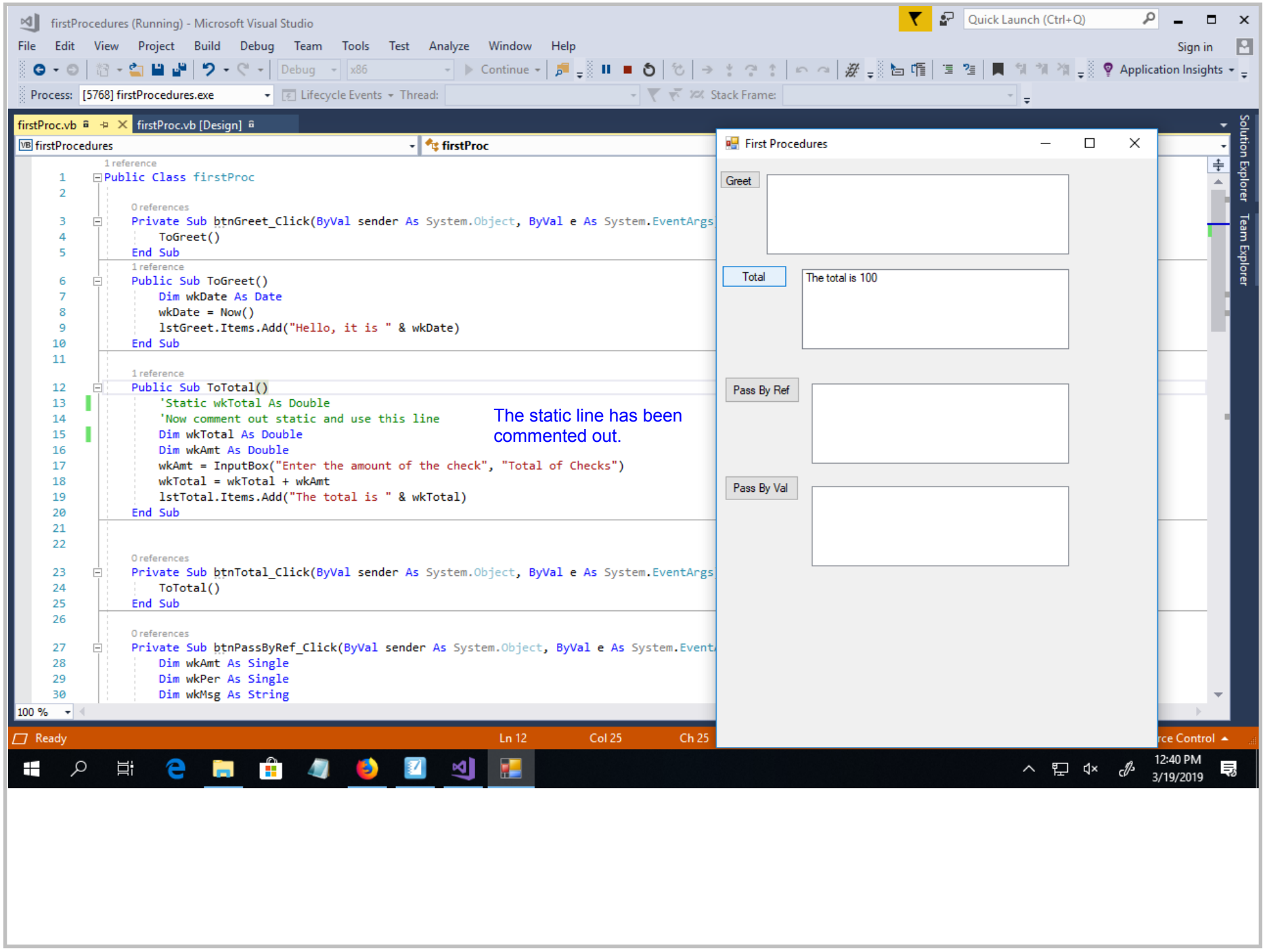
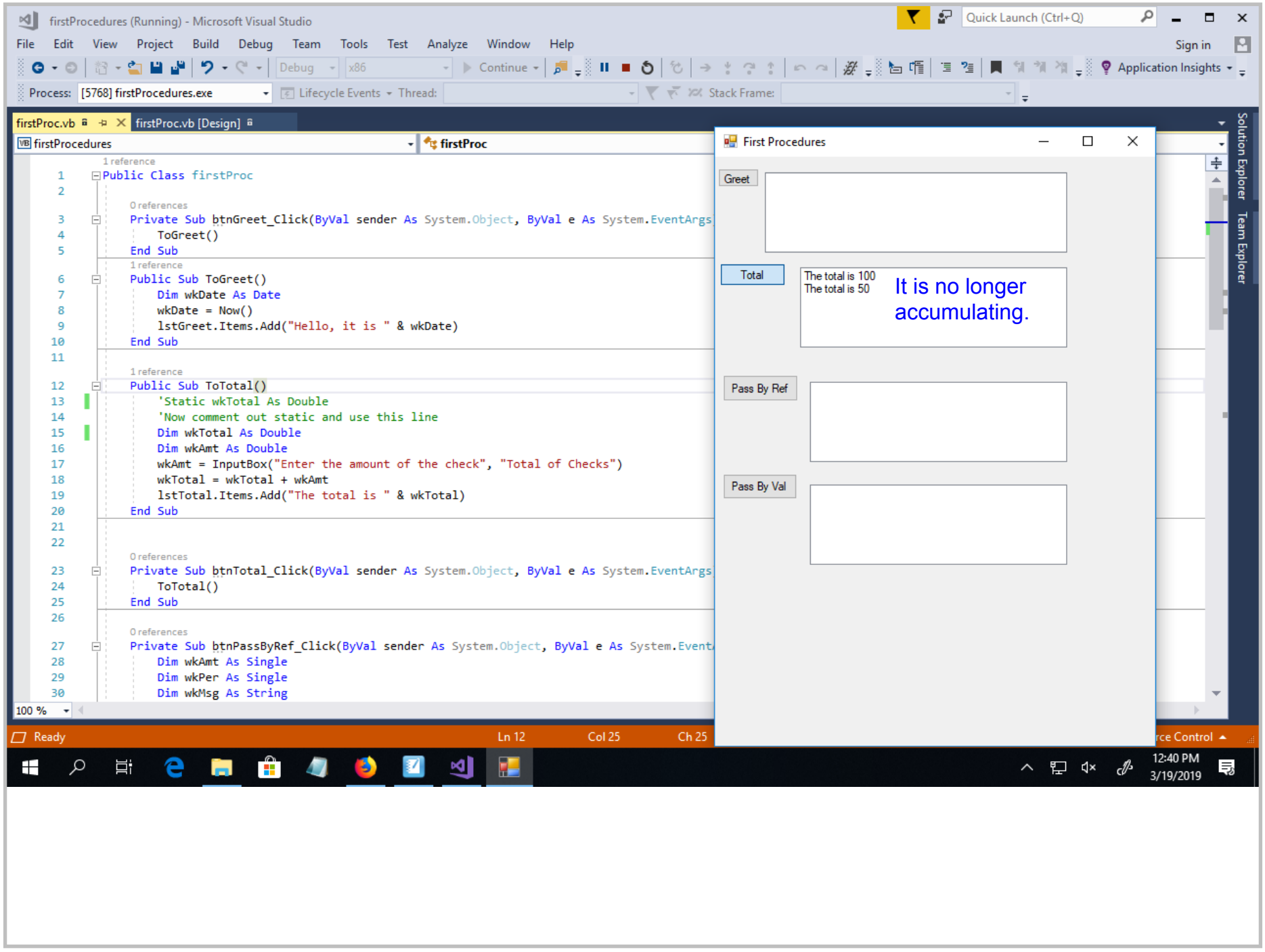

firstProcedures (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
x86
Continue
Application Insights
Process: [11212] firstProcedures.exe
Lifecycle Events
Thread:
firstProc.vb
firstProc.vb [Design]
firstProcedures
btnGreet
1 reference
Public Class firstProc
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
Static wkTotal As Double
'Now comment out static and use this line
'Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of Checks")
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.Event
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
The click event calls this procedure
100 %
Ready
Ln 3
Col 1
Ch 1
INS
Add to Source Control
12:37 PM
3/19/2019
Solution Explorer
Team Explorer
First Procedures
Greet
Hello, it is 3/19/2019 12:36:25 PM
Hello, it is 3/19/2019 12:37:05 PM
Total
Pass By Ref
Pass By Val

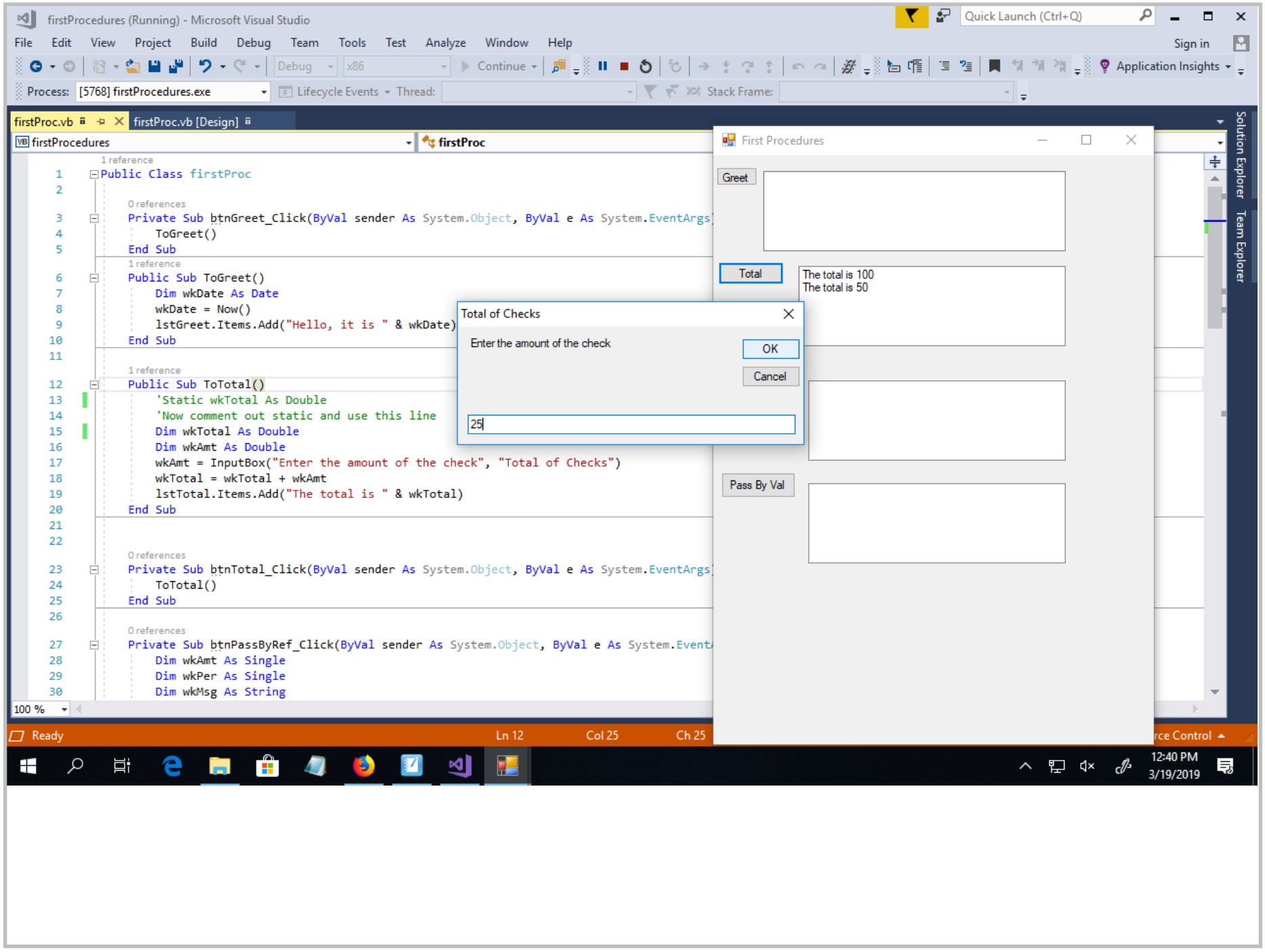

firstProcedures (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
x86
Continue
Application Insights
Process: [11212] firstProcedures.exe
Lifecycle Events
Thread:
firstProc.vb
firstProc.vb [Design]
firstProcedures
btnGreet
1 reference
Public Class firstProc
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
Static wkTotal As Double
'Now comment out static and use this line
'Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of Checks")
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.Event
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
100 %
First Procedures
Greet
Hello, it is 3/19/2019 12:36:25 PM
Hello, it is 3/19/2019 12:37:05 PM
Total
The total is 100
The total is 150
Pass By Ref
Pass By Val
Solution Explorer
Team Explorer
Ready
Ln 4
Col 9
Ch 9
INS
Add to Source Control
12:38 PM
3/19/2019

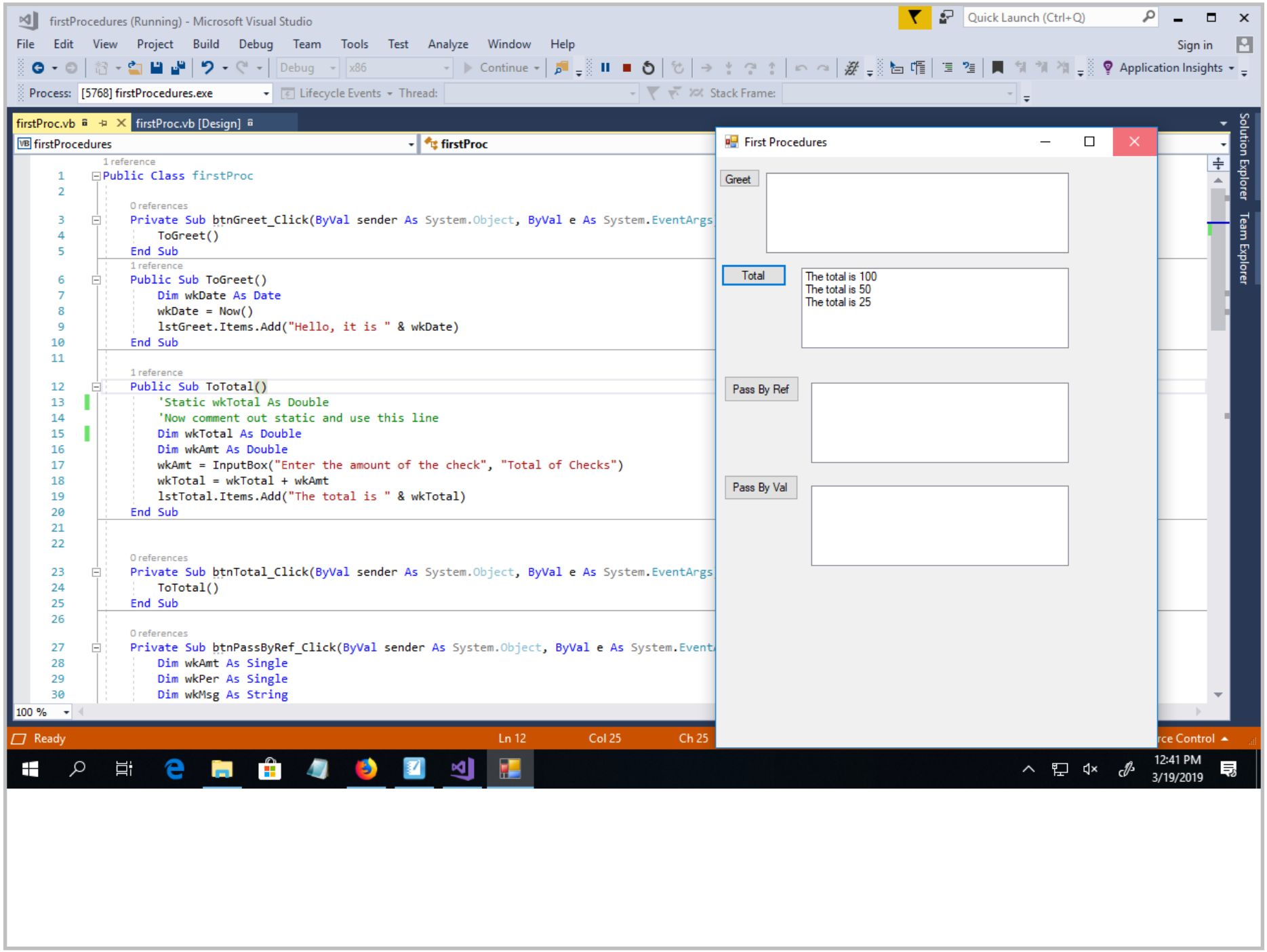

firstProcedures (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
x86
Continue
Application Insights
Process: [11212] firstProcedures.exe
Lifecycle Events
Thread:
firstProc.vb
firstProc.vb [Design]
firstProcedures
btnGreet
1 reference
Public Class firstProc
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
Static wkTotal As Double
'Now comment out static and use this line
'Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of Checks")
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.Event
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
100 %
First Procedures
Greet
Hello, it is 3/19/2019 12:36:25 PM
Hello, it is 3/19/2019 12:37:05 PM
Total
The total is 100
The total is 150
Total of Checks
Enter the amount of the check
OK
Cancel
25
Ready
Ln 4
Col 9
Ch 9
INS
Add to Source Control
12:39 PM
3/19/2019
Solution Explorer
Team Explorer

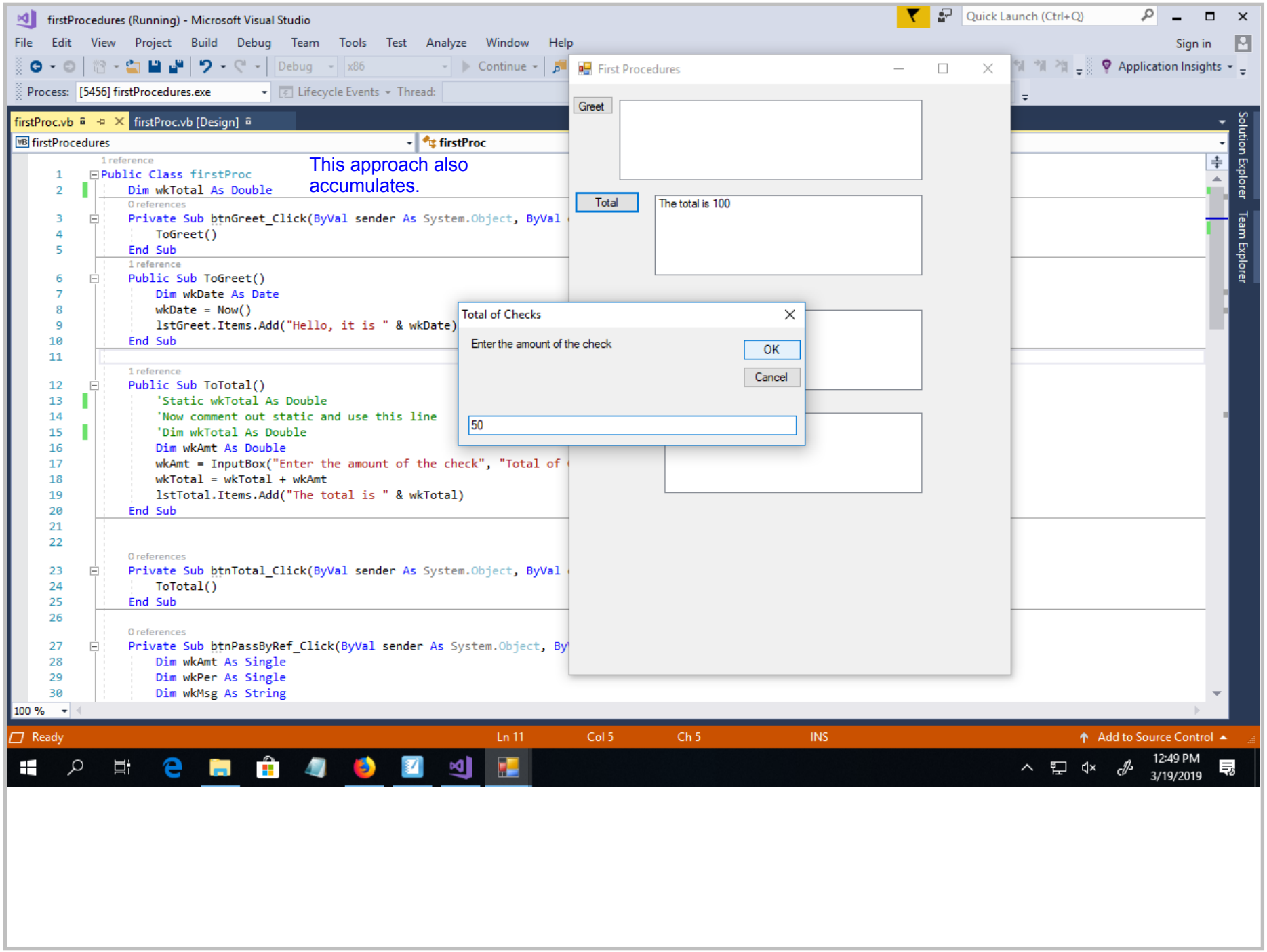

firstProcedures (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Quick Launch (Ctrl+Q)
Debug
x86
Continue
Application Insights
Process: [11212] firstProcedures.exe
Lifecycle Events
Thread:
firstProc.vb
firstProc.vb [Design]
firstProcedures
btnGreet
1 reference
Public Class firstProc
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
Static wkTotal As Double
'Now comment out static and use this line
'Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of Checks")
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.Event
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
100 %
First Procedures
Greet
Hello, it is 3/19/2019 12:36:25 PM
Hello, it is 3/19/2019 12:37:05 PM
Total
The total is 100
The total is 150
The total is 175
Pass By Ref
Pass By Val
Solution Explorer
Team Explorer
Ready
Ln 4
Col 9
Ch 9
INS
Add to Source Control
12:39 PM
3/19/2019

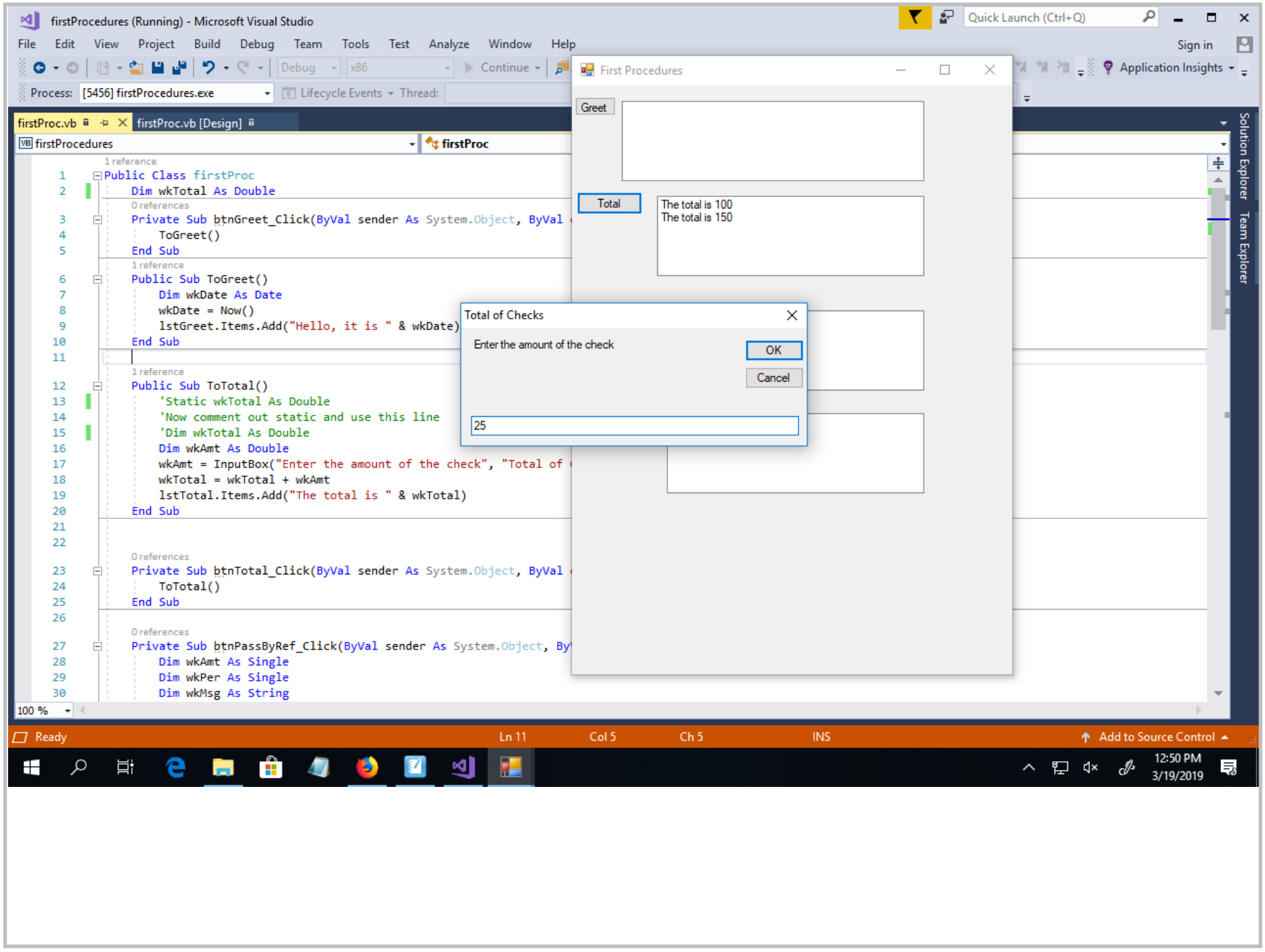

firstProcedures (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
x86
Continue
Application Insights
Process: [5768] firstProcedures.exe
Lifecycle Events
Thread:
Stack Frame:
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
1 reference
Public Class firstProc
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
'Static wkTotal As Double
'Now comment out static and use this line
Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of Checks")
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.Event
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
The static line has been commented out.
First Procedures
Greet
Total
The total is 100
Pass By Ref
Pass By Val
100 %
Ready
Ln 12
Col 25
Ch 25
Solution Explorer
Team Explorer
12:40 PM
3/19/2019

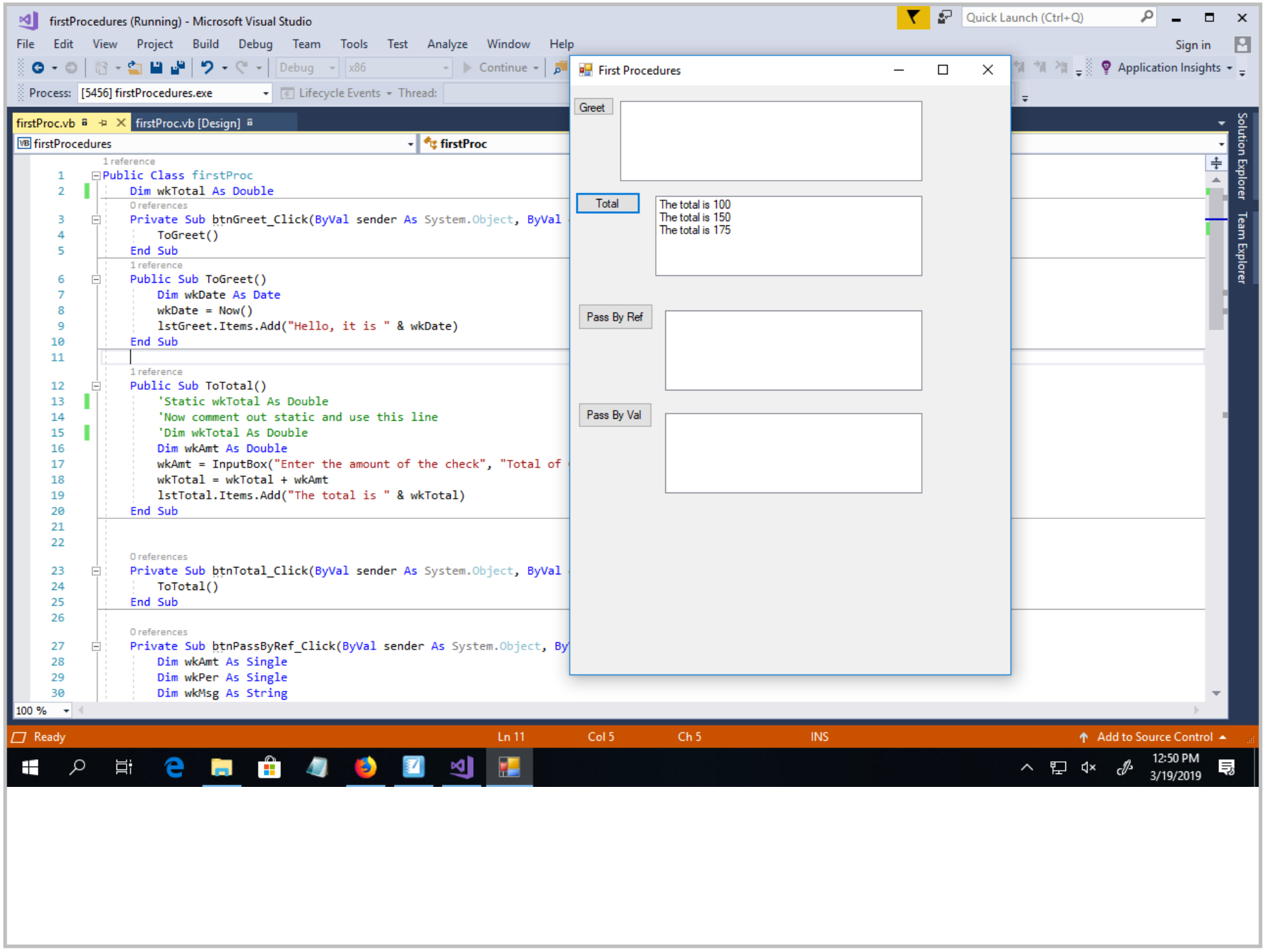

firstProcedures (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Test Analyze Window Help
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
1 reference
Public Class firstProc
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
'Static wkTotal As Double
'Now comment out static and use this line
Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of Checks")
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.Event
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
First Procedures
Greet
Total
The total is 100
The total is 50
It is no longer accumulating.
Pass By Ref
Pass By Val
Ready
Ln 12
Col 25
Ch 25
12:40 PM
3/19/2019

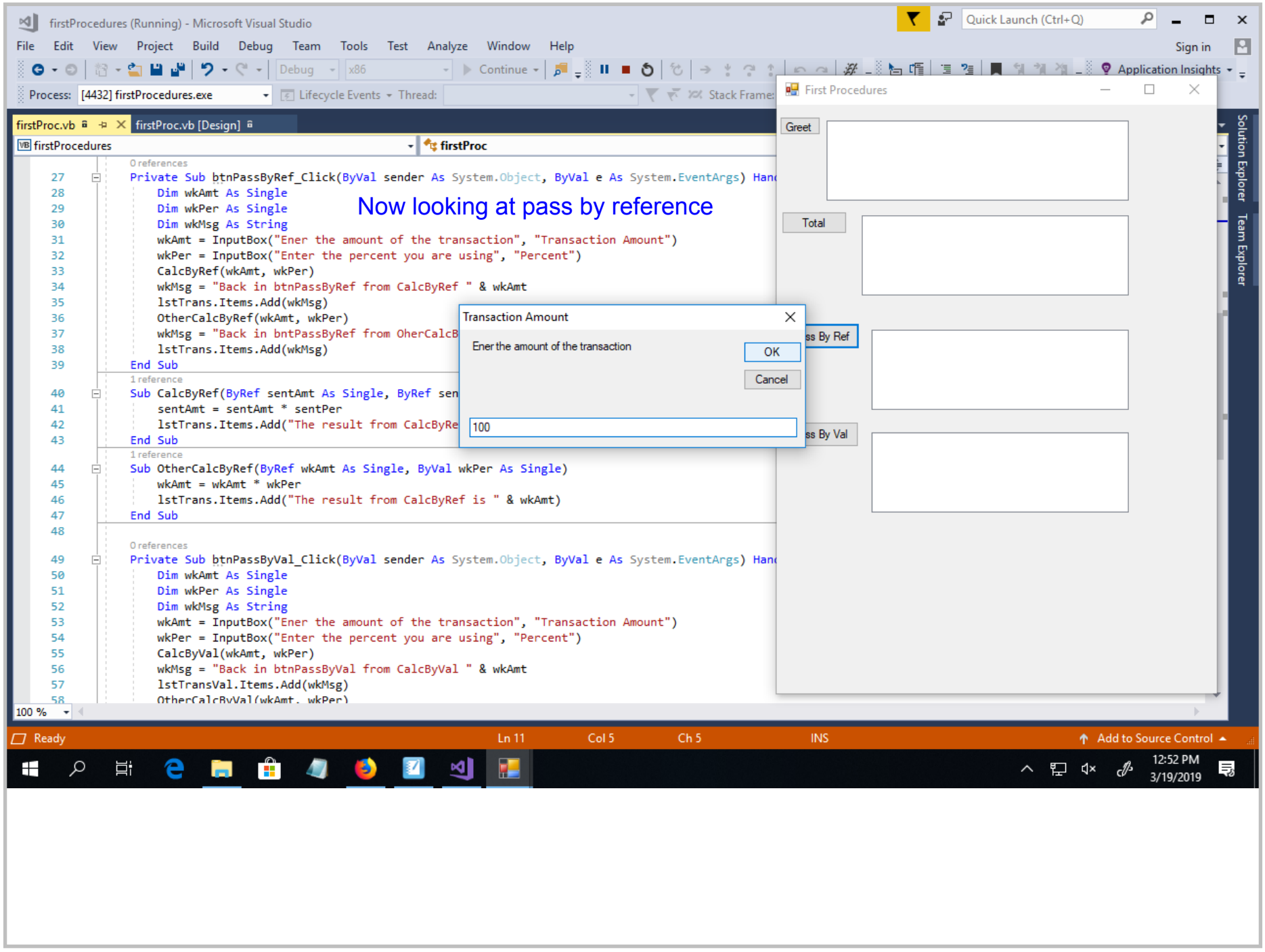

firstProcedures (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
x86
Continue
Application Insights
Process: [5768] firstProcedures.exe
Lifecycle Events
Thread:
Stack Frame:
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
1 reference
Public Class firstProc
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
'Static wkTotal As Double
'Now comment out static and use this line
Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of Checks")
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.Event
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
100 %
Ready
Ln 12
Col 25
Ch 25
Total of Checks
Enter the amount of the check
OK
Cancel
25
First Procedures
Greet
Total
The total is 100
The total is 50
Pass By Val
Solution Explorer
Team Explorer
12:40 PM
3/19/2019

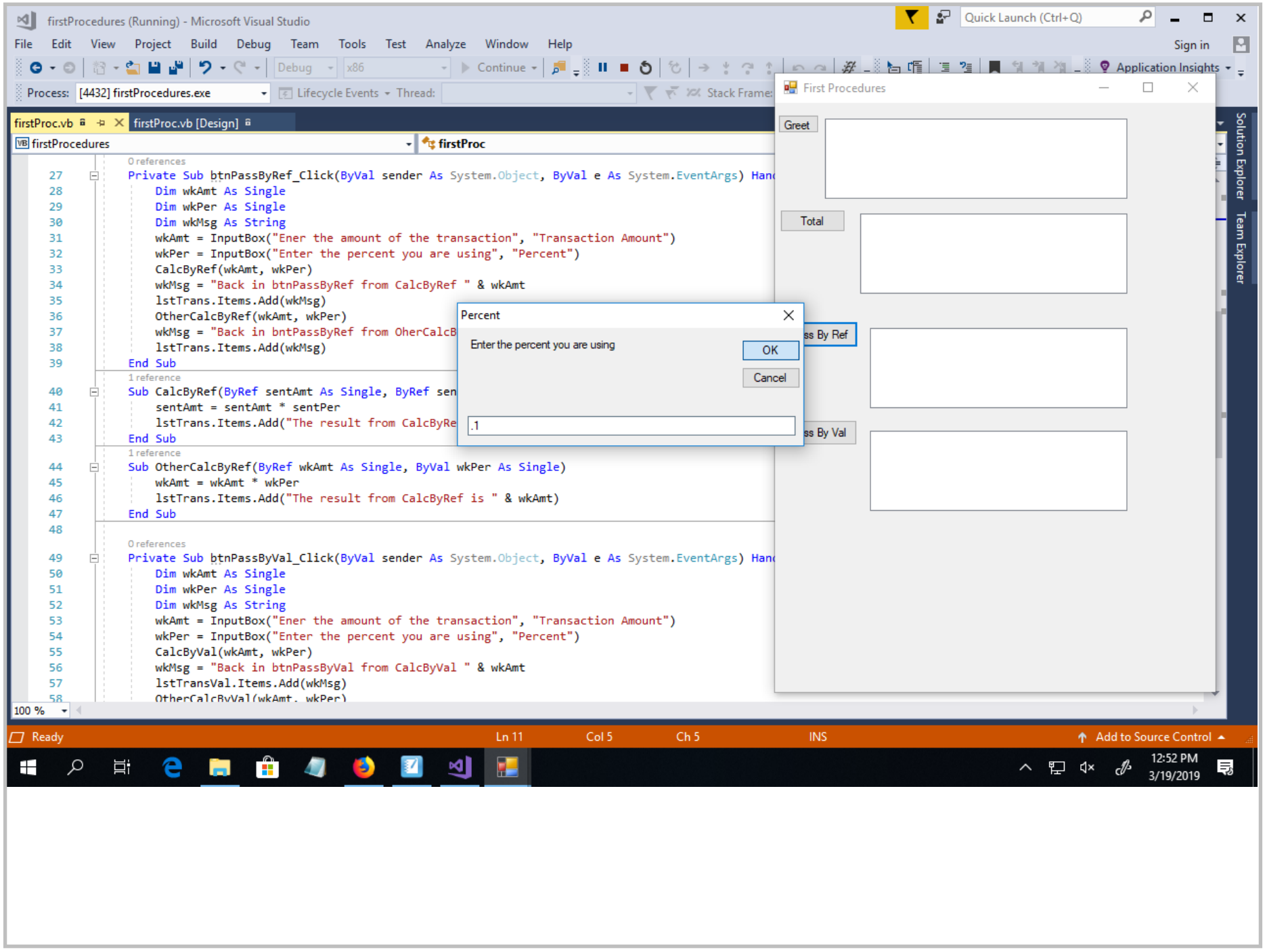

firstProcedures (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
x86
Continue
Application Insights
Process: [5768] firstProcedures.exe
Lifecycle Events
Thread:
Stack Frame:
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
1 reference
Public Class firstProc
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
'Static wkTotal As Double
'Now comment out static and use this line
Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of Checks")
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.Event
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
100 %
Ready
Ln 12
Col 25
Ch 25
First Procedures
Greet
Total
The total is 100
The total is 50
The total is 25
Pass By Ref
Pass By Val
Solution Explorer
Team Explorer
12:41 PM
3/19/2019

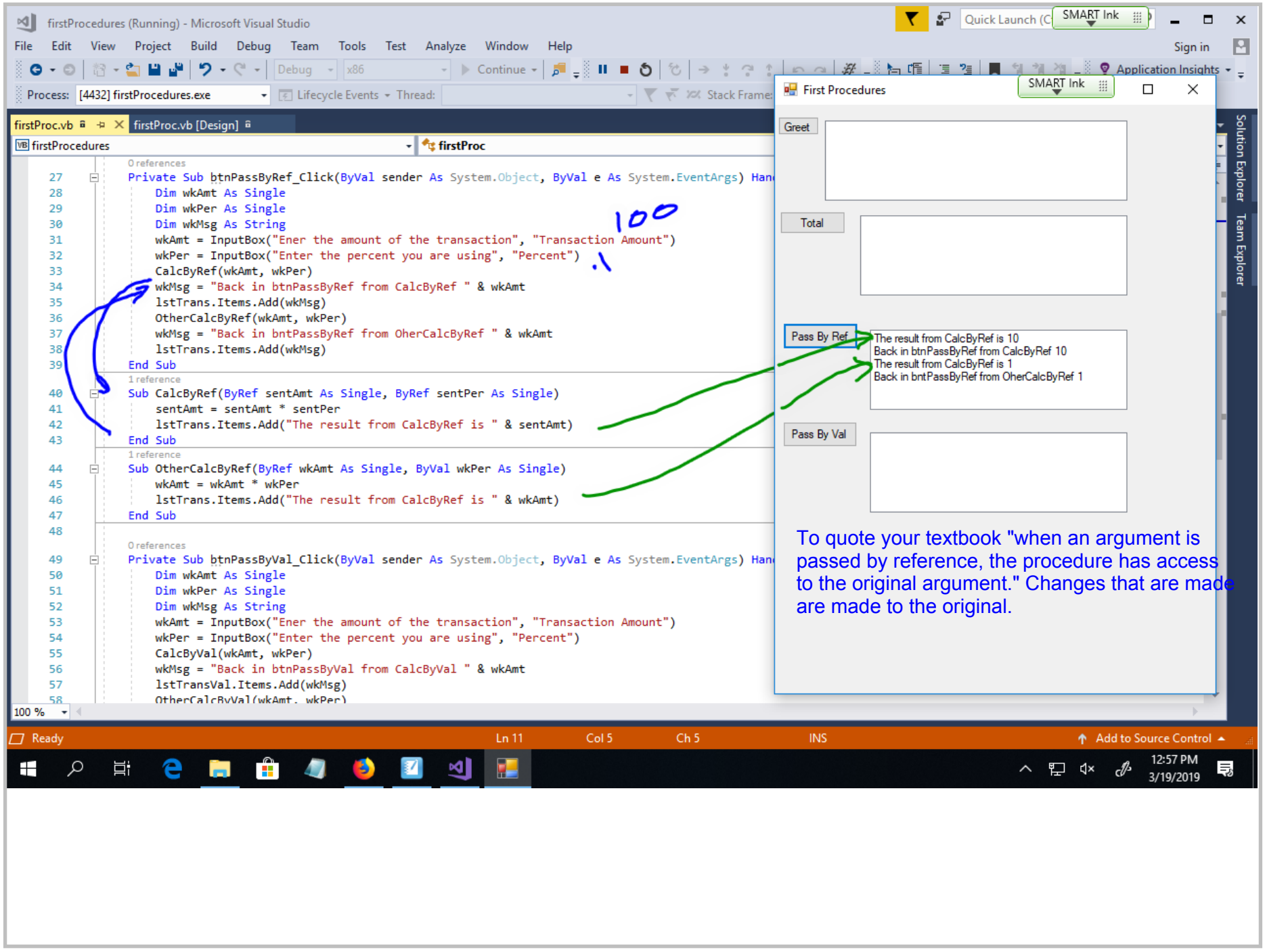

firstProcedures (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Quick Launch (Ctrl+Q)
Process: [5456] firstProcedures.exe
Application Insights
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
This approach also accumulates.
1 reference
Public Class firstProc
Dim wkTotal As Double
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
'Static wkTotal As Double
'Now comment out static and use this line
'Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, By
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
First Procedures
Greet
Total
The total is 100
Total of Checks
Enter the amount of the check
OK
Cancel
50
Solution Explorer
Team Explorer
100 %
Ready
Ln 11
Col 5
Ch 5
INS
Add to Source Control
12:49 PM
3/19/2019

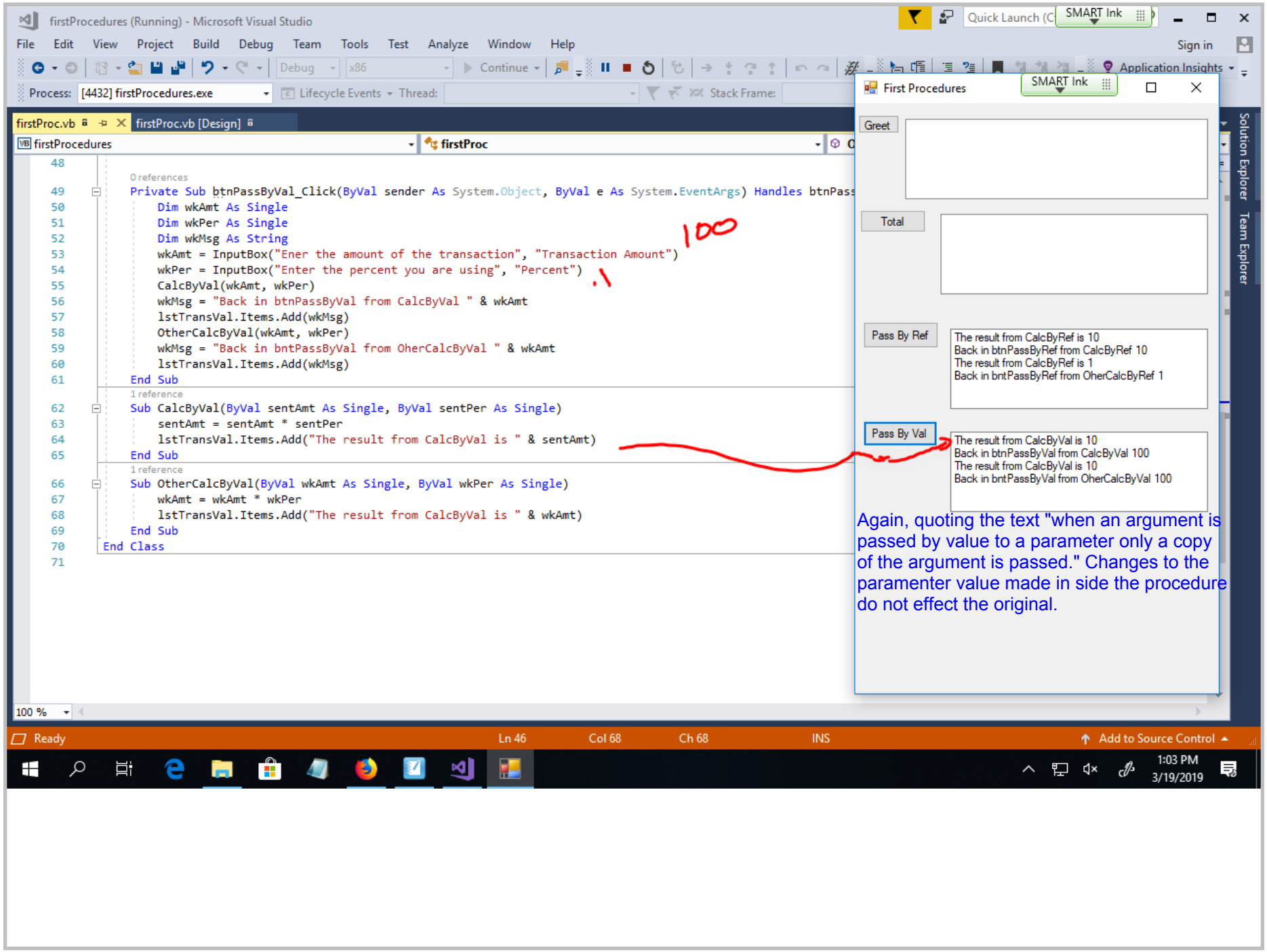

firstProcedures (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
x86
Continue
Application Insights
Process: [5456] firstProcedures.exe
Lifecycle Events
Thread:
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
1 reference
Public Class firstProc
Dim wkTotal As Double
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
'Static wkTotal As Double
'Now comment out static and use this line
'Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, By
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
100 %
First Procedures
Greet
Total
The total is 100
The total is 150
Total of Checks
Enter the amount of the check
OK
Cancel
25
Solution Explorer
Team Explorer
Ready
Ln 11
Col 5
Ch 5
INS
Add to Source Control
12:50 PM
3/19/2019

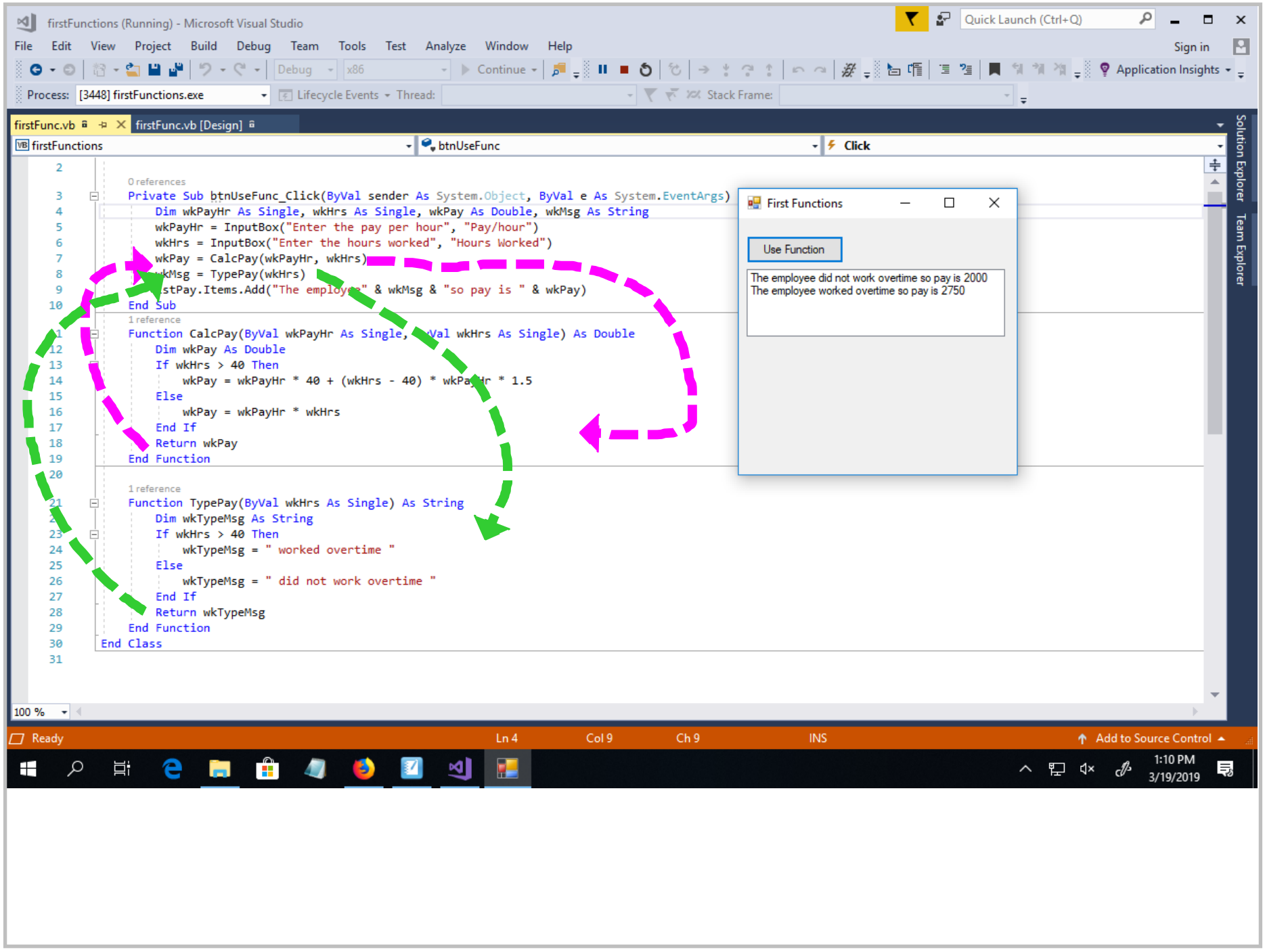

firstProcedures (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Quick Launch (Ctrl+Q)
Debug
x86
Continue
Application Insights
Process: [5456] firstProcedures.exe
Lifecycle Events
Thread:
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
1 reference
Public Class firstProc
Dim wkTotal As Double
0 references
Private Sub btnGreet_Click(ByVal sender As System.Object, ByVal
ToGreet()
End Sub
1 reference
Public Sub ToGreet()
Dim wkDate As Date
wkDate = Now()
lstGreet.Items.Add("Hello, it is " & wkDate)
End Sub
1 reference
Public Sub ToTotal()
'Static wkTotal As Double
'Now comment out static and use this line
'Dim wkTotal As Double
Dim wkAmt As Double
wkAmt = InputBox("Enter the amount of the check", "Total of
wkTotal = wkTotal + wkAmt
lstTotal.Items.Add("The total is " & wkTotal)
End Sub
0 references
Private Sub btnTotal_Click(ByVal sender As System.Object, ByVal
ToTotal()
End Sub
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, By
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
100 %
Ready
Ln 11
Col 5
Ch 5
INS
Add to Source Control
12:50 PM
3/19/2019
Solution Explorer
Team Explorer
First Procedures
Greet
Total
The total is 100
The total is 150
The total is 175
Pass By Ref
Pass By Val

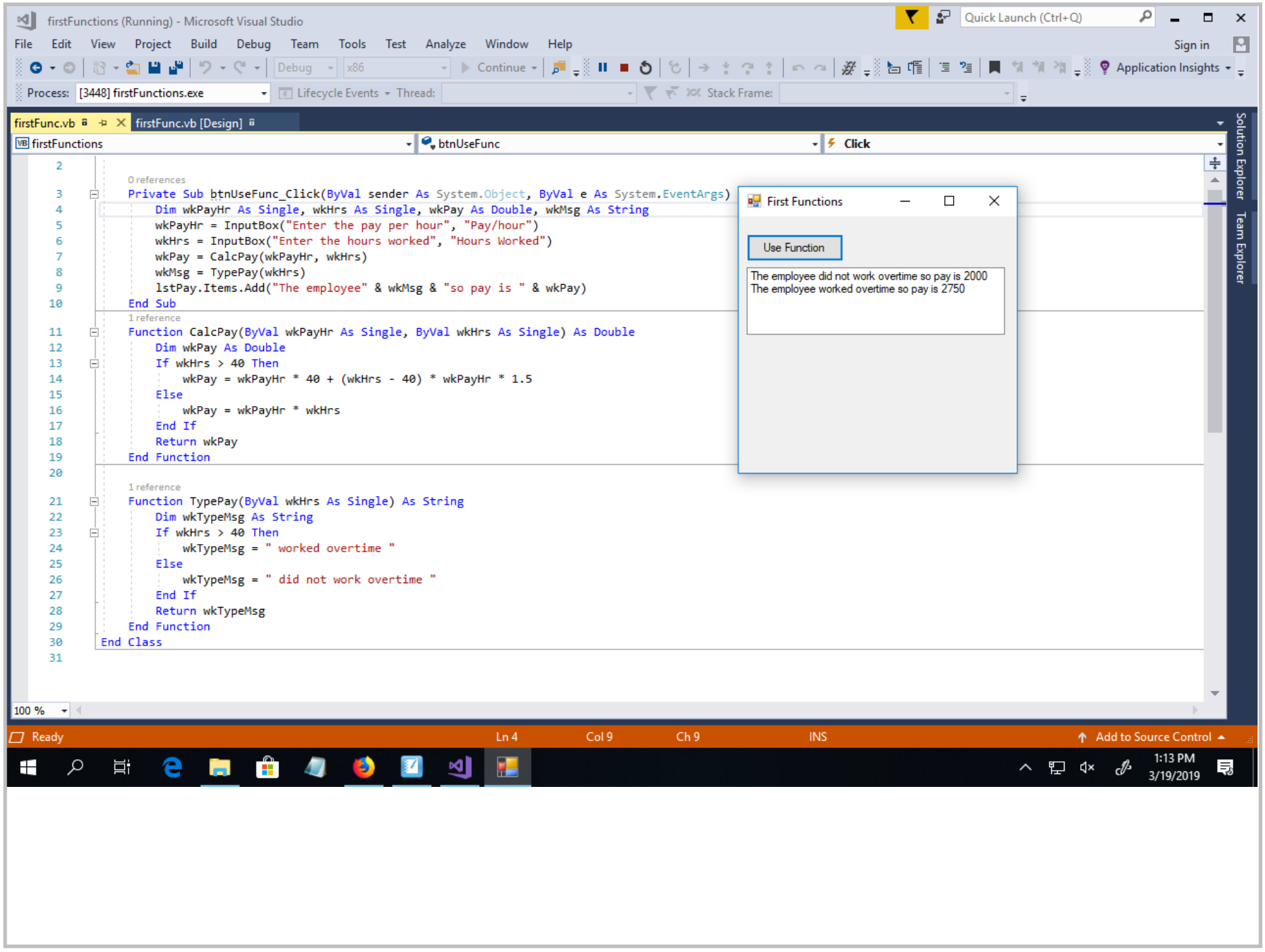

firstProcedures (Running) - Microsoft Visual Studio
Now looking at pass by reference
Transaction Amount
Ener the amount of the transaction
OK
Cancel
100
First Procedures
Greet
Total
Ready


firstProcedures (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
x86
Continue
Application Insights
Process: [4432] firstProcedures.exe
Lifecycle Events
Thread:
Stack Frame:
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Hand
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
wkAmt = InputBox("Ener the amount of the transaction", "Transaction Amount")
wkPer = InputBox("Enter the percent you are using", "Percent")
CalcByRef(wkAmt, wkPer)
wkMsg = "Back in btnPassByRef from CalcByRef " & wkAmt
lstTrans.Items.Add(wkMsg)
OtherCalcByRef(wkAmt, wkPer)
wkMsg = "Back in bntPassByRef from OherCalcB
lstTrans.Items.Add(wkMsg)
End Sub
1 reference
Sub CalcByRef(ByRef sentAmt As Single, ByRef sen
sentAmt = sentAmt * sentPer
lstTrans.Items.Add("The result from CalcByRe
End Sub
1 reference
Sub OtherCalcByRef(ByRef wkAmt As Single, ByVal wkPer As Single)
wkAmt = wkAmt * wkPer
lstTrans.Items.Add("The result from CalcByRef is " & wkAmt)
End Sub
0 references
Private Sub btnPassByVal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Hand
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
wkAmt = InputBox("Ener the amount of the transaction", "Transaction Amount")
wkPer = InputBox("Enter the percent you are using", "Percent")
CalcByVal(wkAmt, wkPer)
wkMsg = "Back in btnPassByVal from CalcByVal " & wkAmt
lstTransVal.Items.Add(wkMsg)
OtherCalcByVal(wkAmt, wkPer)
100 %
Percent
Enter the percent you are using
OK
Cancel
.1
First Procedures
Greet
Total
ss By Ref
ss By Val
Solution Explorer
Team Explorer
Ready
Ln 11
Col 5
Ch 5
INS
Add to Source Control
12:52 PM
3/19/2019

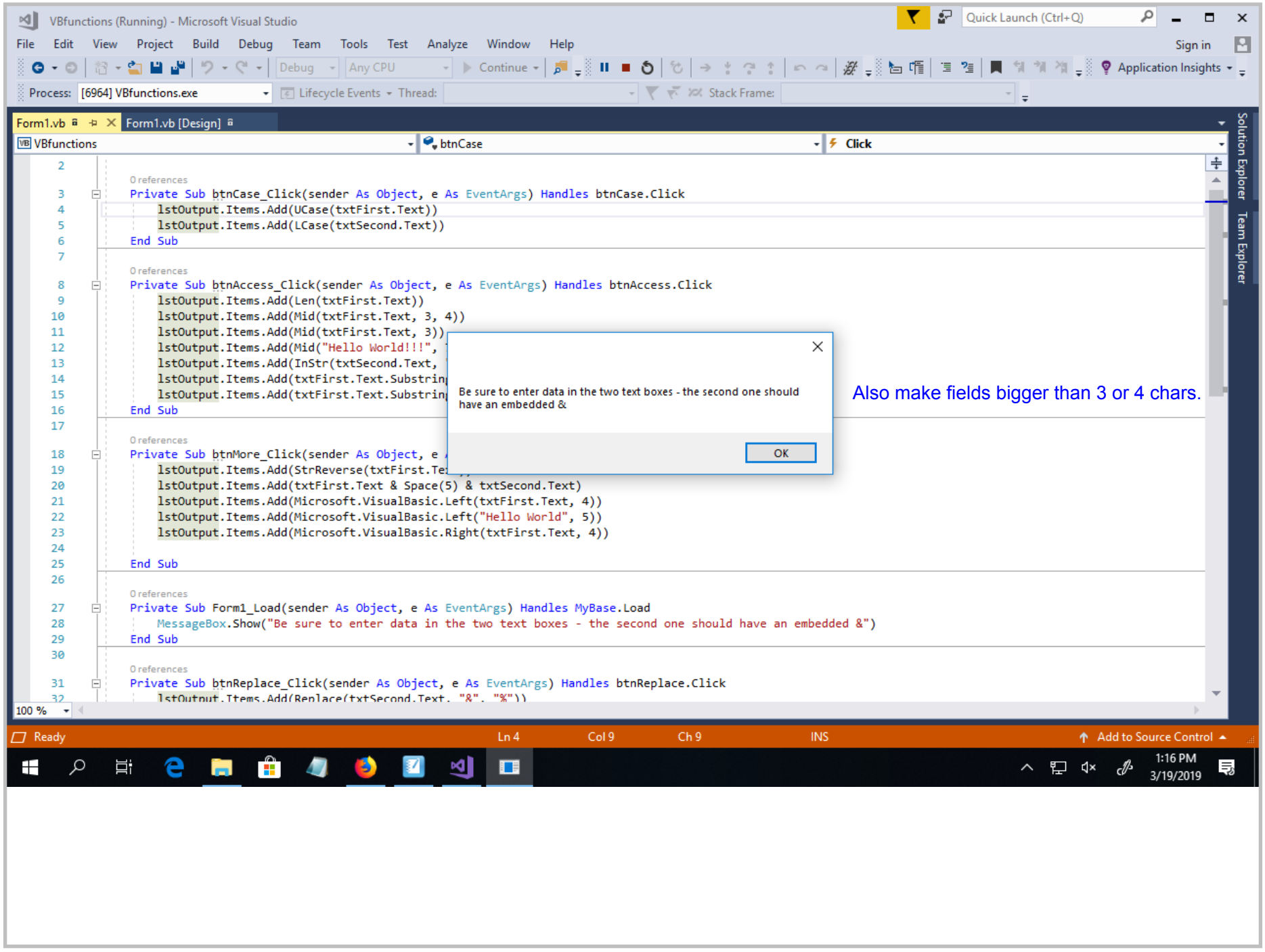

firstProcedures (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Process: [4432] firstProcedures.exe
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
0 references
Private Sub btnPassByRef_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Han
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
wkAmt = InputBox("Ener the amount of the transaction", "Transaction Amount")
wkPer = InputBox("Enter the percent you are using", "Percent")
CalcByRef(wkAmt, wkPer)
wkMsg = "Back in btnPassByRef from CalcByRef " & wkAmt
lstTrans.Items.Add(wkMsg)
OtherCalcByRef(wkAmt, wkPer)
wkMsg = "Back in bntPassByRef from OherCalcByRef " & wkAmt
lstTrans.Items.Add(wkMsg)
End Sub
1 reference
Sub CalcByRef(ByRef sentAmt As Single, ByRef sentPer As Single)
sentAmt = sentAmt * sentPer
lstTrans.Items.Add("The result from CalcByRef is " & sentAmt)
End Sub
1 reference
Sub OtherCalcByRef(ByRef wkAmt As Single, ByVal wkPer As Single)
wkAmt = wkAmt * wkPer
lstTrans.Items.Add("The result from CalcByRef is " & wkAmt)
End Sub
0 references
Private Sub btnPassByVal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Han
Dim wkAmt As Single
Dim wkPer As Single
Dim wkMsg As String
wkAmt = InputBox("Ener the amount of the transaction", "Transaction Amount")
wkPer = InputBox("Enter the percent you are using", "Percent")
CalcByVal(wkAmt, wkPer)
wkMsg = "Back in btnPassByVal from CalcByVal " & wkAmt
lstTransVal.Items.Add(wkMsg)
100
.1
First Procedures
Greet
Total
Pass By Ref
The result from CalcByRef is 10
Back in btnPassByRef from CalcByRef 10
The result from CalcByRef is 1
Back in bntPassByRef from OherCalcByRef 1
Pass By Val
To quote your textbook "when an argument is passed by reference, the procedure has access to the original argument." Changes that are made are made to the original.
Ready
Ln 11
Col 5
Ch 5
INS
Add to Source Control
12:57 PM
3/19/2019


firstProcedures (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Process: [4432] firstProcedures.exe
firstProc.vb
firstProc.vb [Design]
firstProcedures
firstProc
48
0 references
49 Private Sub btnPassByVal_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnPass
50 Dim wkAmt As Single
51 Dim wkPer As Single
52 Dim wkMsg As String
53 wkAmt = InputBox("Ener the amount of the transaction", "Transaction Amount")
54 wkPer = InputBox("Enter the percent you are using", "Percent")
55 CalcByVal(wkAmt, wkPer)
56 wkMsg = "Back in btnPassByVal from CalcByVal " & wkAmt
57 lstTransVal.Items.Add(wkMsg)
58 OtherCalcByVal(wkAmt, wkPer)
59 wkMsg = "Back in bntPassByVal from OherCalcByVal " & wkAmt
60 lstTransVal.Items.Add(wkMsg)
61 End Sub
1 reference
62 Sub CalcByVal(ByVal sentAmt As Single, ByVal sentPer As Single)
63 sentAmt = sentAmt * sentPer
64 lstTransVal.Items.Add("The result from CalcByVal is " & sentAmt)
65 End Sub
1 reference
66 Sub OtherCalcByVal(ByVal wkAmt As Single, ByVal wkPer As Single)
67 wkAmt = wkAmt * wkPer
68 lstTransVal.Items.Add("The result from CalcByVal is " & wkAmt)
69 End Sub
70 End Class
71
100
.1
100 %
Ready
Ln 46
Col 68
Ch 68
INS
Add to Source Control
1:03 PM
3/19/2019
First Procedures
SMART Ink
Greet
Total
Pass By Ref
The result from CalcByRef is 10
Back in btnPassByRef from CalcByRef 10
The result from CalcByRef is 1
Back in bntPassByRef from OherCalcByRef 1
Pass By Val
The result from CalcByVal is 10
Back in btnPassByVal from CalcByVal 100
The result from CalcByVal is 10
Back in bntPassByVal from OherCalcByVal 100
Again, quoting the text "when an argument is passed by value to a parameter only a copy of the argument is passed." Changes to the paramenter value made in side the procedure do not effect the original.
Solution Explorer
Team Explorer

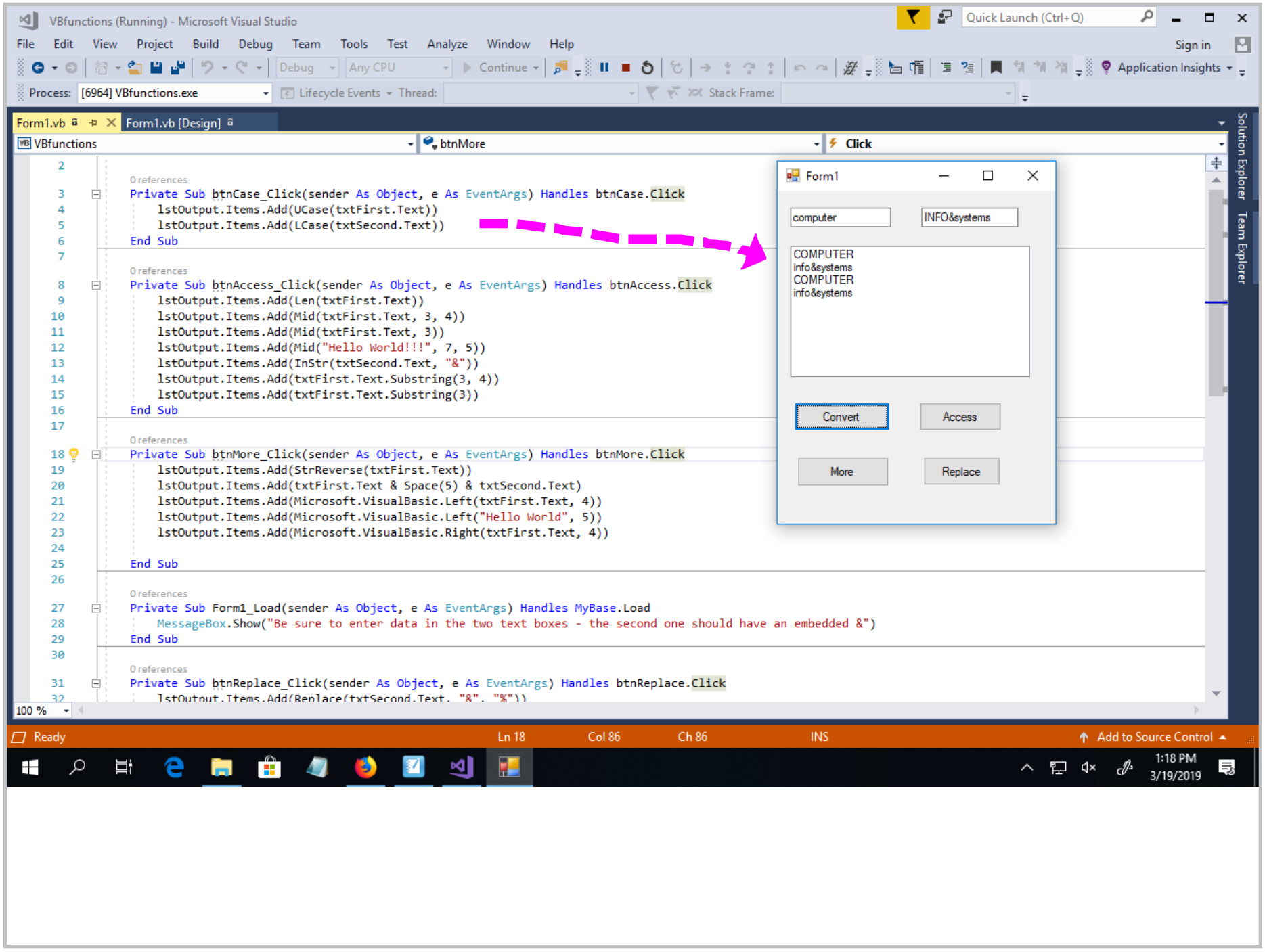

firstFunctions (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Test Analyze Window Help
firstFunc.vb
firstFunc.vb [Design]
firstFunctions
btnUseFunc
Click
0 references
Private Sub btnUseFunc_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Dim wkPayHr As Single, wkHrs As Single, wkPay As Double, wkMsg As String
wkPayHr = InputBox("Enter the pay per hour", "Pay/hour")
wkHrs = InputBox("Enter the hours worked", "Hours Worked")
wkPay = CalcPay(wkPayHr, wkHrs)
wkMsg = TypePay(wkHrs)
lstPay.Items.Add("The employee" & wkMsg & "so pay is " & wkPay)
End Sub
1 reference
Function CalcPay(ByVal wkPayHr As Single, ByVal wkHrs As Single) As Double
Dim wkPay As Double
If wkHrs > 40 Then
wkPay = wkPayHr * 40 + (wkHrs - 40) * wkPayHr * 1.5
Else
wkPay = wkPayHr * wkHrs
End If
Return wkPay
End Function
1 reference
Function TypePay(ByVal wkHrs As Single) As String
Dim wkTypeMsg As String
If wkHrs > 40 Then
wkTypeMsg = " worked overtime "
Else
wkTypeMsg = " did not work overtime "
End If
Return wkTypeMsg
End Function
End Class
First Functions
Use Function
The employee did not work overtime so pay is 2000
The employee worked overtime so pay is 2750
Ready
Ln 4
Col 9
Ch 9
INS
Add to Source Control
1:10 PM
3/19/2019

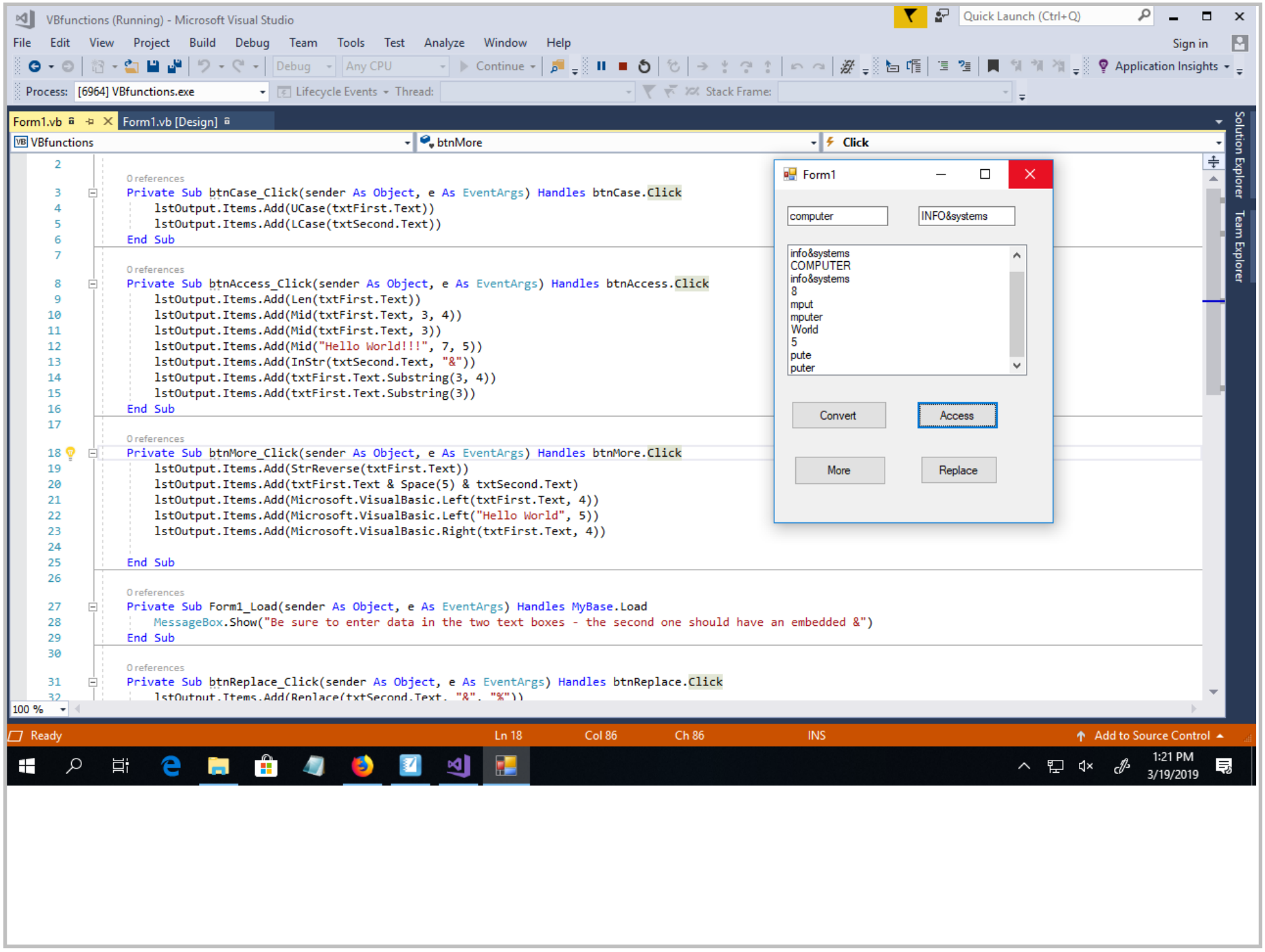


Title: Mar 19-1:13 PM (17 of 23)



Title: Mar 19-1:16 PM (18 of 23)


VBfunctions (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
Any CPU
Continue
Application Insights
Process: [6964] VBfunctions.exe
Lifecycle Events
Thread:
Stack Frame:
Form1.vb
Form1.vb [Design]
VBfunctions
btnMore
Click
0 references
Private Sub btnCase_Click(sender As Object, e As EventArgs) Handles btnCase.Click
lstOutput.Items.Add(UCase(txtFirst.Text))
lstOutput.Items.Add(LCase(txtSecond.Text))
End Sub
0 references
Private Sub btnAccess_Click(sender As Object, e As EventArgs) Handles btnAccess.Click
lstOutput.Items.Add(Len(txtFirst.Text))
lstOutput.Items.Add(Mid(txtFirst.Text, 3, 4))
lstOutput.Items.Add(Mid(txtFirst.Text, 3))
lstOutput.Items.Add(Mid("Hello World!!!", 7, 5))
lstOutput.Items.Add(InStr(txtSecond.Text, "&"))
lstOutput.Items.Add(txtFirst.Text.Substring(3, 4))
lstOutput.Items.Add(txtFirst.Text.Substring(3))
End Sub
0 references
Private Sub btnMore_Click(sender As Object, e As EventArgs) Handles btnMore.Click
lstOutput.Items.Add(StrReverse(txtFirst.Text))
lstOutput.Items.Add(txtFirst.Text & Space(5) & txtSecond.Text)
lstOutput.Items.Add(Microsoft.VisualBasic.Left(txtFirst.Text, 4))
lstOutput.Items.Add(Microsoft.VisualBasic.Left("Hello World", 5))
lstOutput.Items.Add(Microsoft.VisualBasic.Right(txtFirst.Text, 4))
End Sub
0 references
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
MessageBox.Show("Be sure to enter data in the two text boxes - the second one should have an embedded &")
End Sub
0 references
Private Sub btnReplace_Click(sender As Object, e As EventArgs) Handles btnReplace.Click
Form1
computer
INFO&systems
COMPUTER
info&systems
COMPUTER
info&systems
Convert
Access
More
Replace
100 %
Ready
Ln 18
Col 86
Ch 86
INS
Add to Source Control
1:18 PM
3/19/2019
Solution Explorer
Team Explorer


VBfunctions (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
Any CPU
Continue
Application Insights
Process: [6964] VBfunctions.exe
Lifecycle Events
Thread:
Stack Frame:
Form1.vb
Form1.vb [Design]
VBfunctions
btnMore
Click
0 references
Private Sub btnCase_Click(sender As Object, e As EventArgs) Handles btnCase.Click
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lstOutput.Items.Add(LCase(txtSecond.Text))
End Sub
0 references
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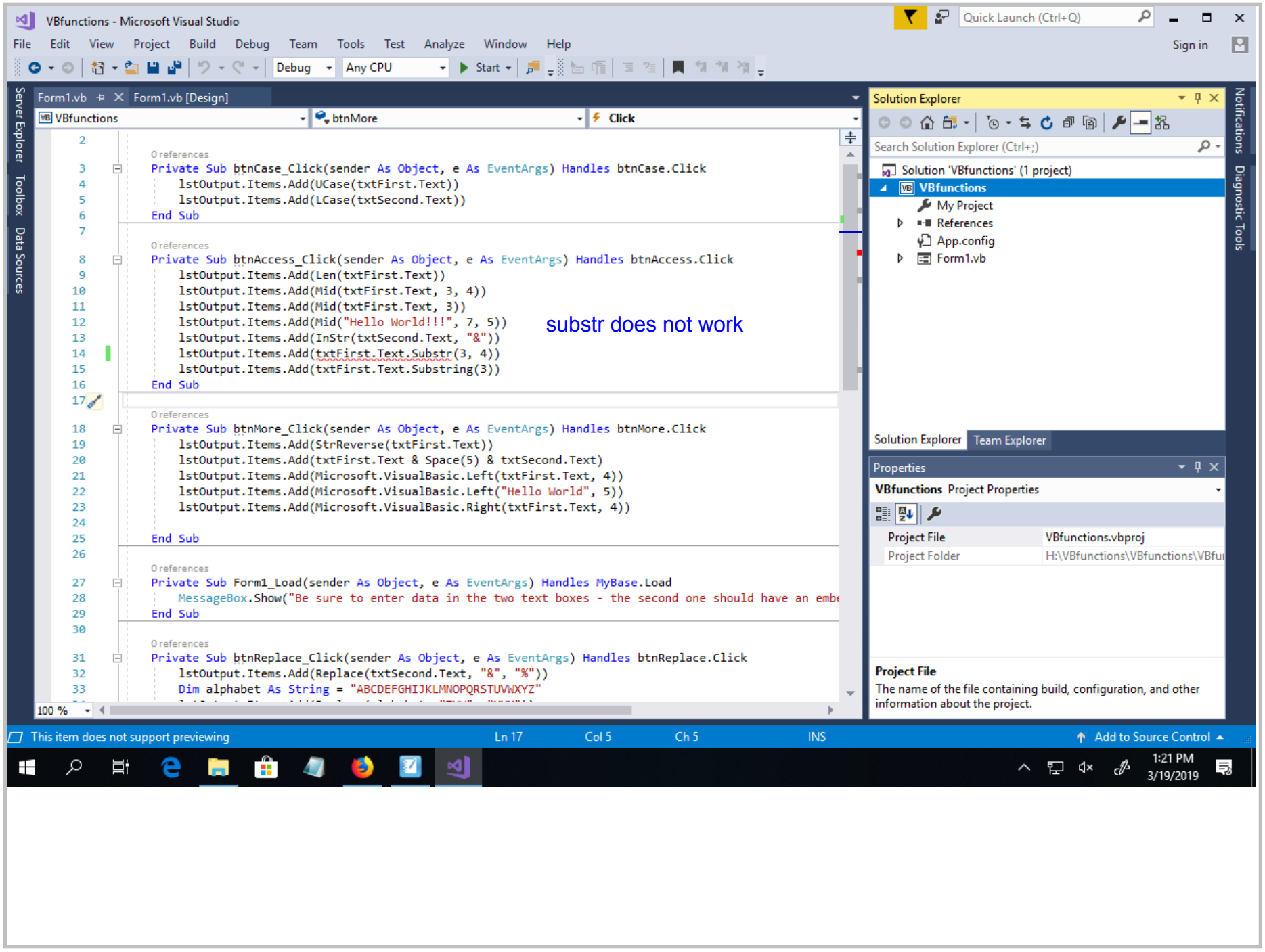
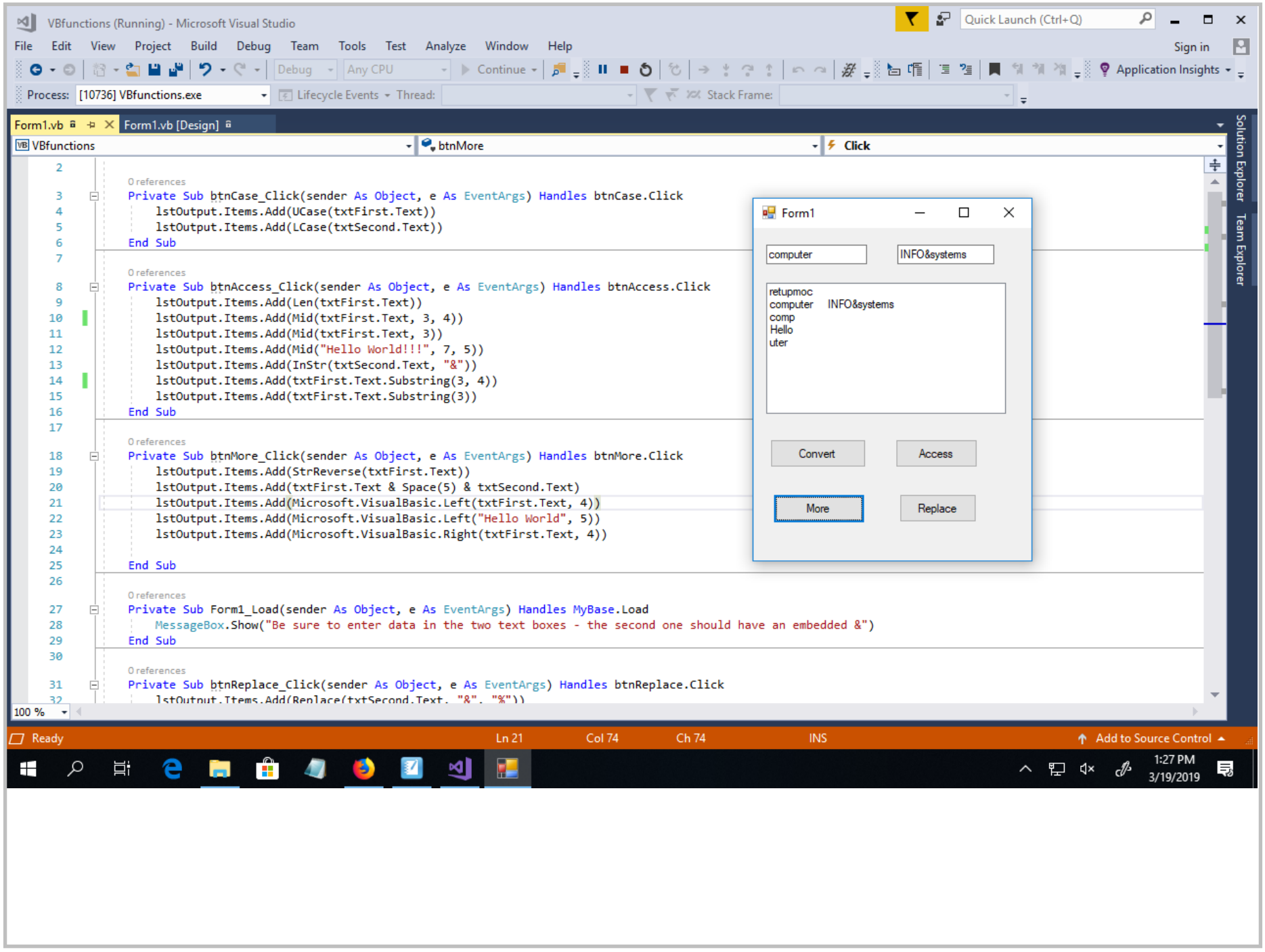
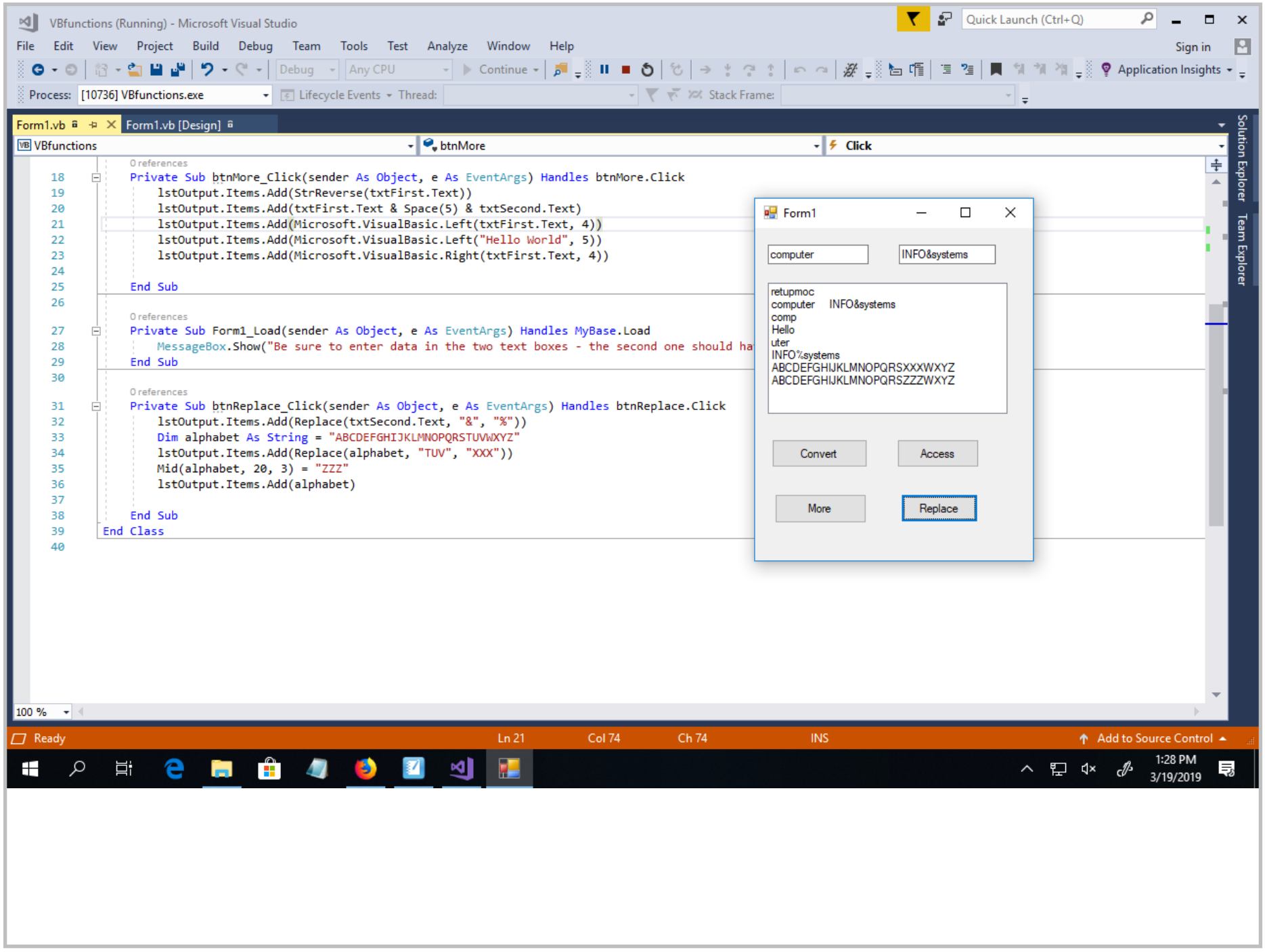
lstOutput.Items.Add(Len(txtFirst.Text))
lstOutput.Items.Add(Mid(txtFirst.Text, 3, 4))
lstOutput.Items.Add(Mid(txtFirst.Text, 3))
lstOutput.Items.Add(Mid("Hello World!!!", 7, 5))
lstOutput.Items.Add(InStr(txtSecond.Text, "&"))
lstOutput.Items.Add(txtFirst.Text.Substring(3, 4))
lstOutput.Items.Add(txtFirst.Text.Substring(3))
End Sub
0 references
Private Sub btnMore_Click(sender As Object, e As EventArgs) Handles btnMore.Click
lstOutput.Items.Add(StrReverse(txtFirst.Text))
lstOutput.Items.Add(txtFirst.Text & Space(5) & txtSecond.Text)
lstOutput.Items.Add(Microsoft.VisualBasic.Left(txtFirst.Text, 4))
lstOutput.Items.Add(Microsoft.VisualBasic.Left("Hello World", 5))
lstOutput.Items.Add(Microsoft.VisualBasic.Right(txtFirst.Text, 4))
End Sub
0 references
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
MessageBox.Show("Be sure to enter data in the two text boxes - the second one should have an embedded &")
End Sub
0 references
Private Sub btnReplace_Click(sender As Object, e As EventArgs) Handles btnReplace.Click
Form1
computer
INFO&systems
info&systems
COMPUTER
info&systems
8
mput
mputer
World
5
pute
puter
Convert
Access
More
Replace
100 %
Ready
Ln 18
Col 86
Ch 86
INS
Add to Source Control
1:21 PM
3/19/2019
Solution Explorer
Team Explorer



Title: Mar 19-1:21 PM (21 of 23)


VBfunctions (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
Any CPU
Continue
Application Insights
Process: [10736] VBfunctions.exe
Lifecycle Events
Thread:
Stack Frame:
Form1.vb
Form1.vb [Design]
VBfunctions
btnMore
Click
0 references
Private Sub btnCase_Click(sender As Object, e As EventArgs) Handles btnCase.Click
lstOutput.Items.Add(UCase(txtFirst.Text))
lstOutput.Items.Add(LCase(txtSecond.Text))
End Sub
0 references
Private Sub btnAccess_Click(sender As Object, e As EventArgs) Handles btnAccess.Click
lstOutput.Items.Add(Len(txtFirst.Text))
lstOutput.Items.Add(Mid(txtFirst.Text, 3, 4))
lstOutput.Items.Add(Mid(txtFirst.Text, 3))
lstOutput.Items.Add(Mid("Hello World!!!", 7, 5))
lstOutput.Items.Add(InStr(txtSecond.Text, "&"))
lstOutput.Items.Add(txtFirst.Text.Substring(3, 4))
lstOutput.Items.Add(txtFirst.Text.Substring(3))
End Sub
0 references
Private Sub btnMore_Click(sender As Object, e As EventArgs) Handles btnMore.Click
lstOutput.Items.Add(StrReverse(txtFirst.Text))
lstOutput.Items.Add(txtFirst.Text & Space(5) & txtSecond.Text)
lstOutput.Items.Add(Microsoft.VisualBasic.Left(txtFirst.Text, 4))
lstOutput.Items.Add(Microsoft.VisualBasic.Left("Hello World", 5))
lstOutput.Items.Add(Microsoft.VisualBasic.Right(txtFirst.Text, 4))
End Sub
0 references
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
MessageBox.Show("Be sure to enter data in the two text boxes - the second one should have an embedded &")
End Sub
0 references
Private Sub btnReplace_Click(sender As Object, e As EventArgs) Handles btnReplace.Click
Form1
computer
INFO&systems
retupmoc
computer INFO&systems
comp
Hello
uter
Convert
Access
More
Replace
100 %
Ready
Ln 21
Col 74
Ch 74
INS
Add to Source Control
1:27 PM
3/19/2019
Solution Explorer
Team Explorer


VBfunctions (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Sign in
Debug
Any CPU
Continue
Application Insights
Process: [10736] VBfunctions.exe
Lifecycle Events
Thread:
Stack Frame:
Form1.vb
Form1.vb [Design]
VBfunctions
btnMore
Click
0 references
Private Sub btnMore_Click(sender As Object, e As EventArgs) Handles btnMore.Click
lstOutput.Items.Add(StrReverse(txtFirst.Text))
lstOutput.Items.Add(txtFirst.Text & Space(5) & txtSecond.Text)
lstOutput.Items.Add(Microsoft.VisualBasic.Left(txtFirst.Text, 4))
lstOutput.Items.Add(Microsoft.VisualBasic.Left("Hello World", 5))
lstOutput.Items.Add(Microsoft.VisualBasic.Right(txtFirst.Text, 4))
End Sub
0 references
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
MessageBox.Show("Be sure to enter data in the two text boxes - the second one should ha
End Sub
0 references
Private Sub btnReplace_Click(sender As Object, e As EventArgs) Handles btnReplace.Click
lstOutput.Items.Add(Replace(txtSecond.Text, "&", "%"))
Dim alphabet As String = "ABCDEFGHIJKLMNOPQRSTUVWXYZ"
lstOutput.Items.Add(Replace(alphabet, "TUV", "XXX"))
Mid(alphabet, 20, 3) = "ZZZ"
lstOutput.Items.Add(alphabet)
End Sub
End Class
Form1
computer
INFO&systems
retupmoc
computer INFO&systems
comp
Hello
uter
INFO%systems
ABCDEFGHIJKLMNOPQRSXXXWXYZ
ABCDEFGHIJKLMNOPQRSZZZWXYZ
Convert
Access
More
Replace
Solution Explorer
Team Explorer
100 %
Ready
Ln 21
Col 74
Ch 74
INS
Add to Source Control
1:28 PM
3/19/2019