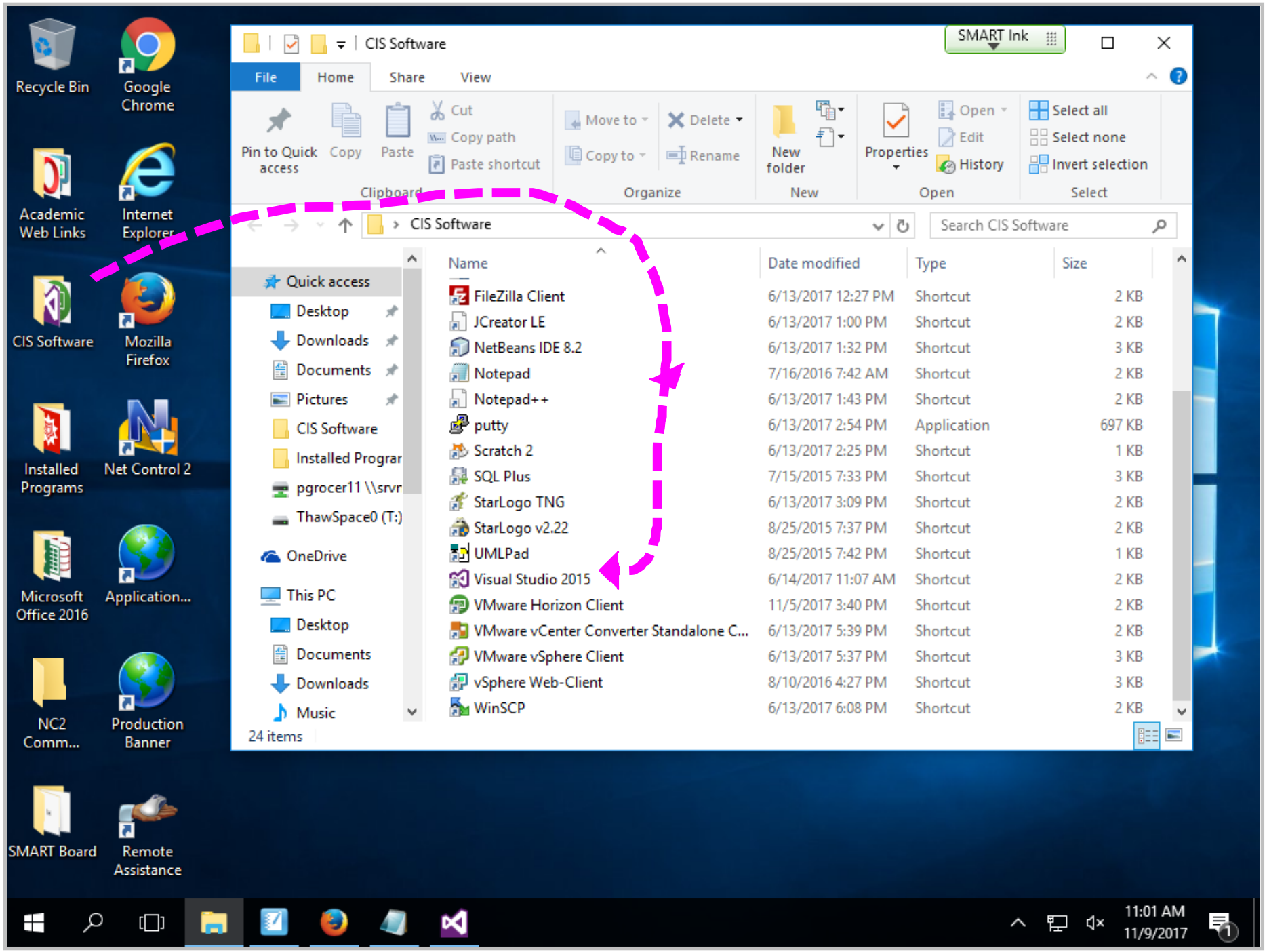
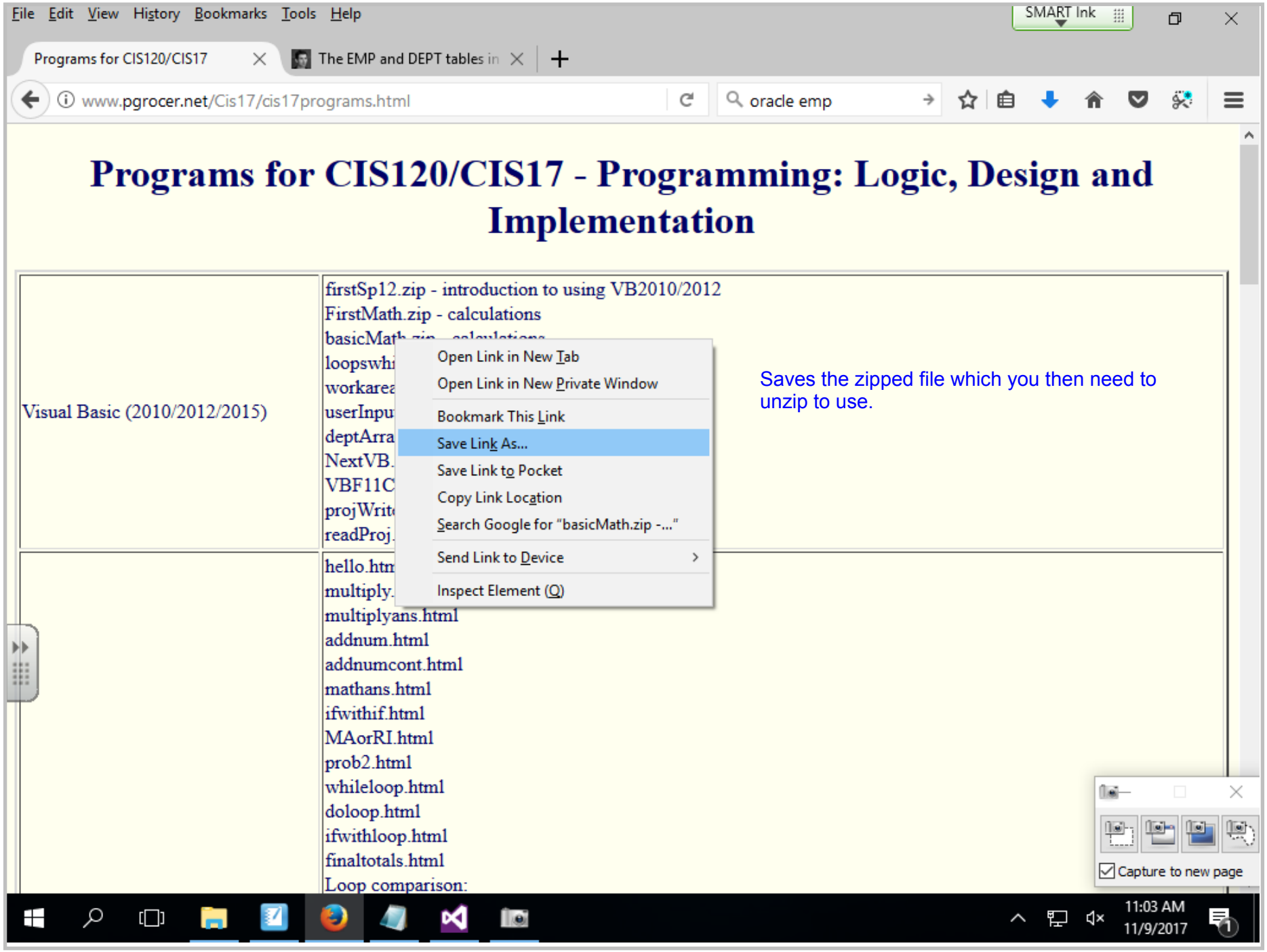
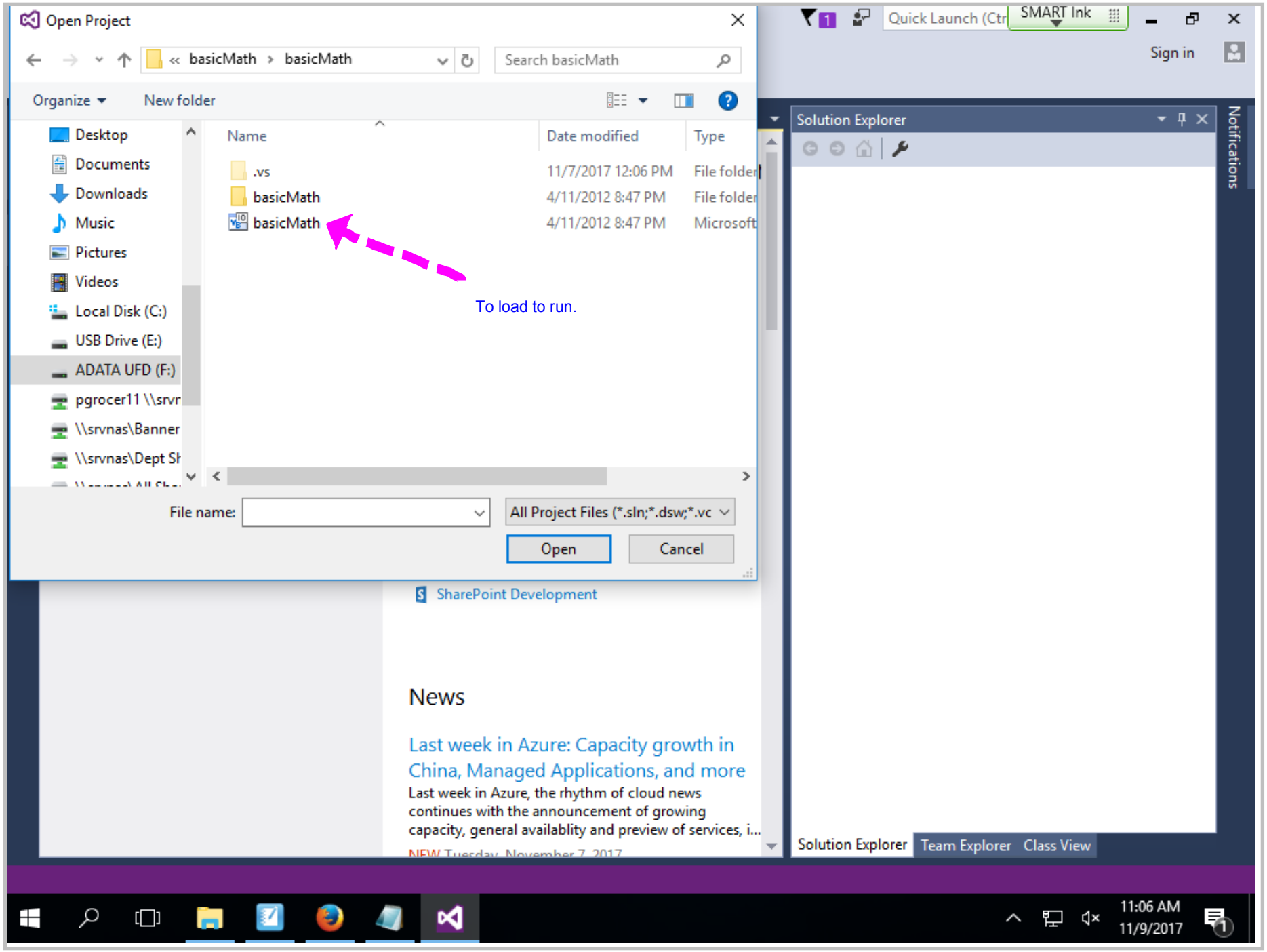
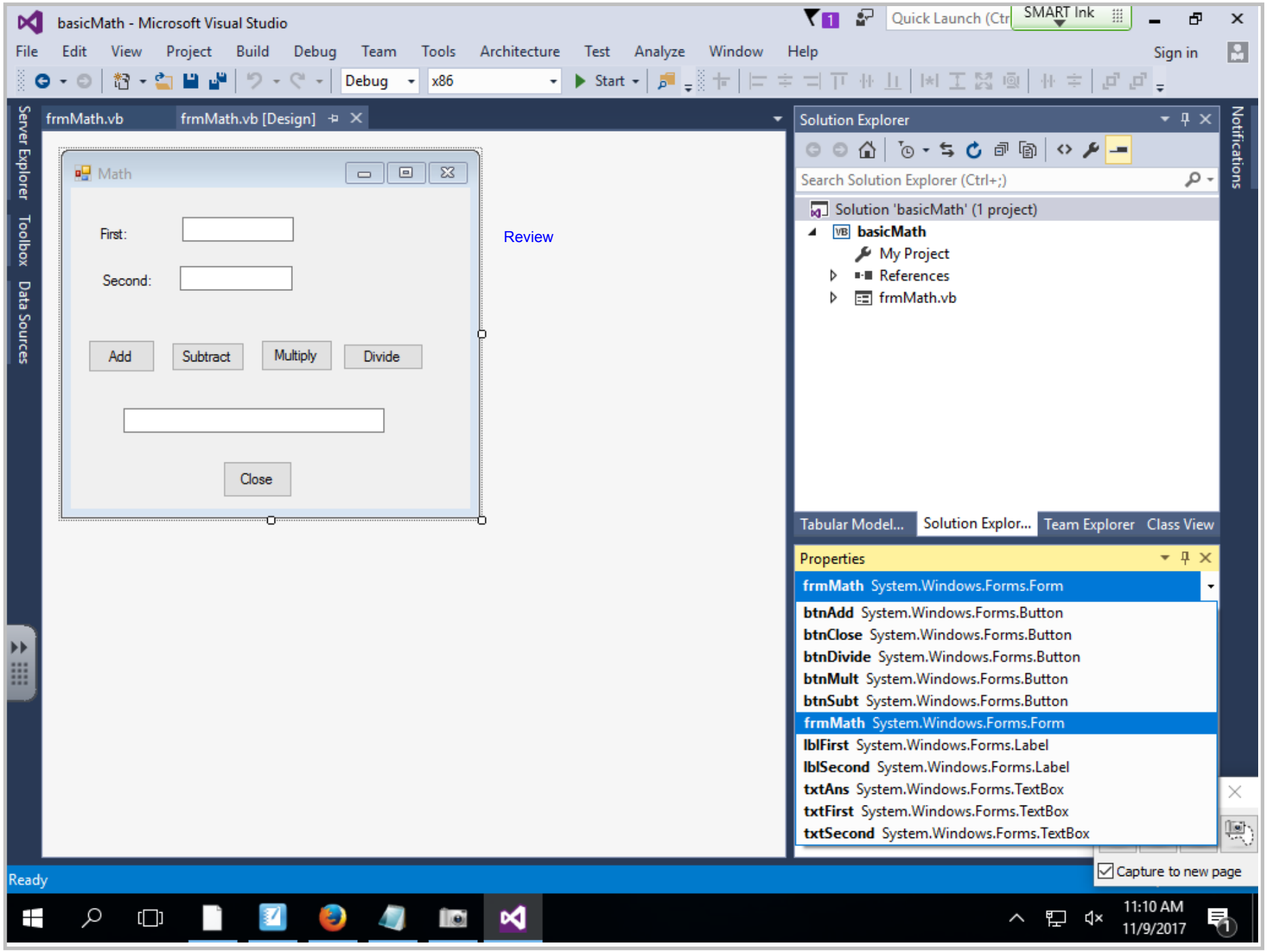


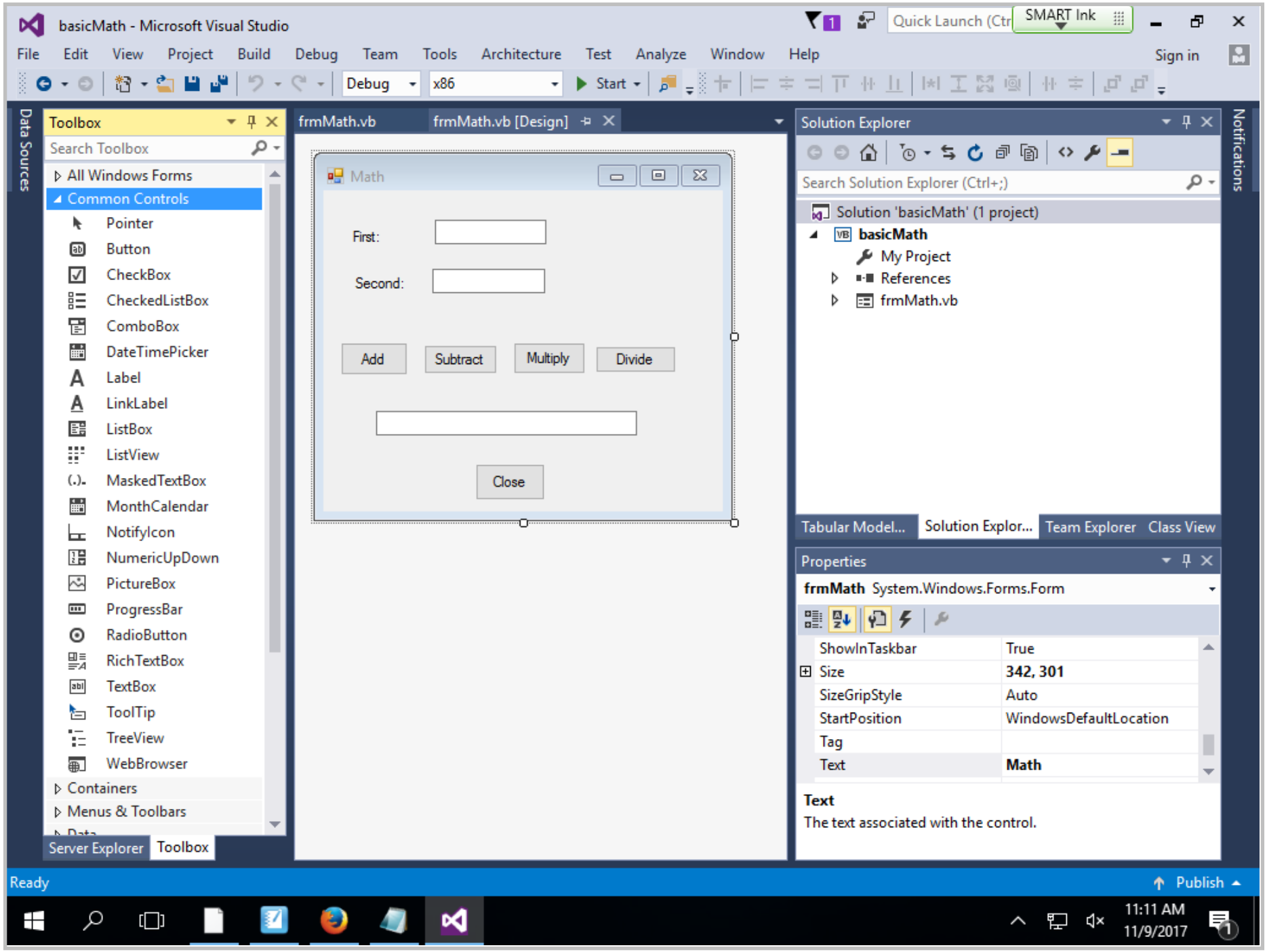
Title: Nov 9-10:51 AM (1 of 39)


File Edit View History Bookmarks Tools Help
SMART Ink
Programs for CIS120/CIS17
The EMP and DEPT tables in
www.pgrocer.net/Cis17/cis17programs.html
oracle emp
Programs for CIS120/CIS17 - Programming: Logic, Design and Implementation
Visual Basic (2010/2012/2015)
firstSp12.zip - introduction to using VB2010/2012
FirstMath.zip - calculations
Open Link in New Tab
Open Link in New Private Window
Bookmark This Link
Save Link As...
Save Link to Pocket
Copy Link Location
Search Google for "basicMath.zip -..."
Send Link to Device
Inspect Element (Q)
Saves the zipped file which you then need to unzip to use.
hello.htm
multiply.
multiplyans.html
addnum.html
addnumcont.html
mathans.html
ifwithif.html
MAorRI.html
prob2.html
whileloop.html
doloop.html
ifwithloop.html
finaltotals.html
Loop comparison:
Capture to new page
11:03 AM
11/9/2017

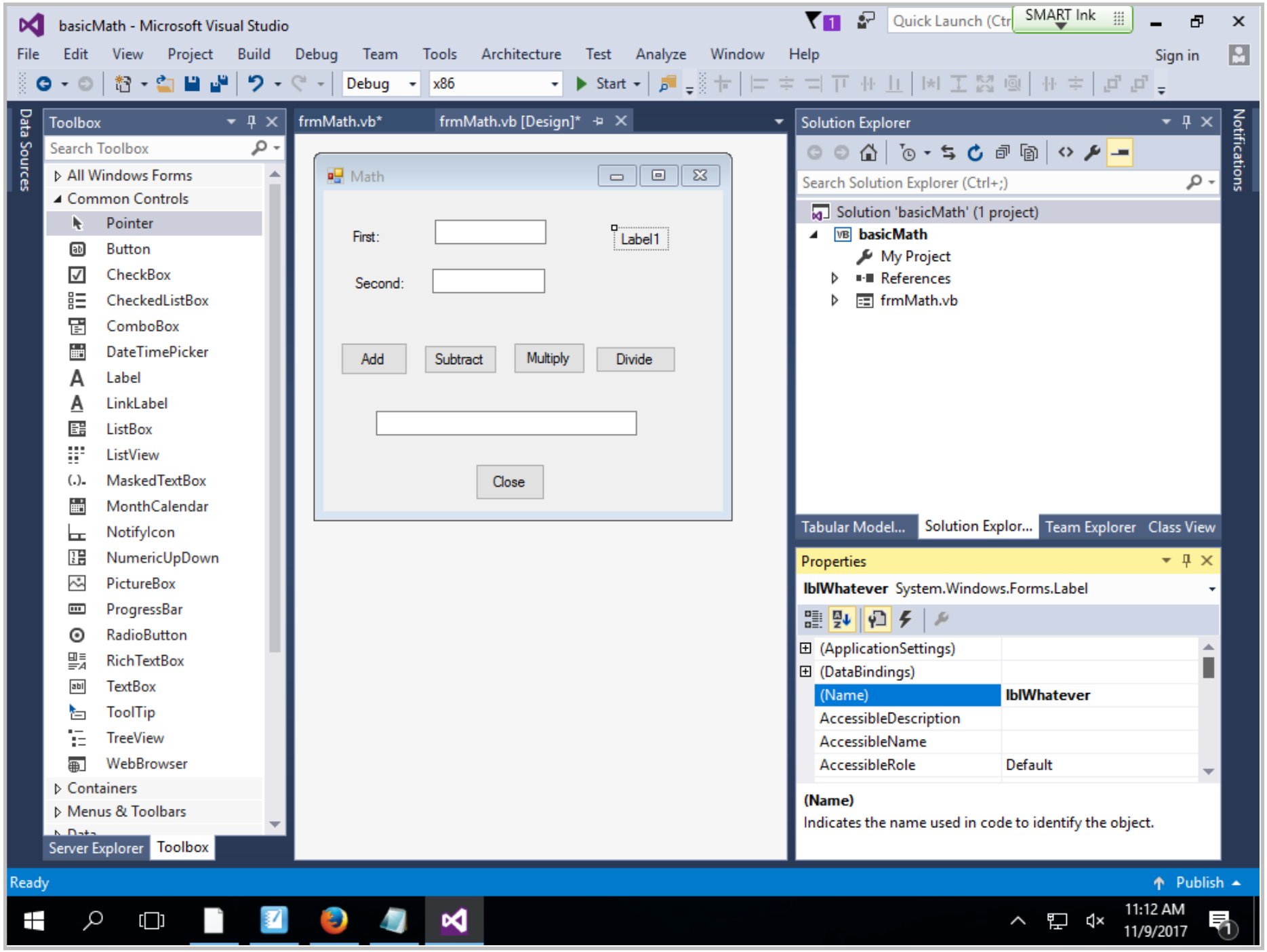


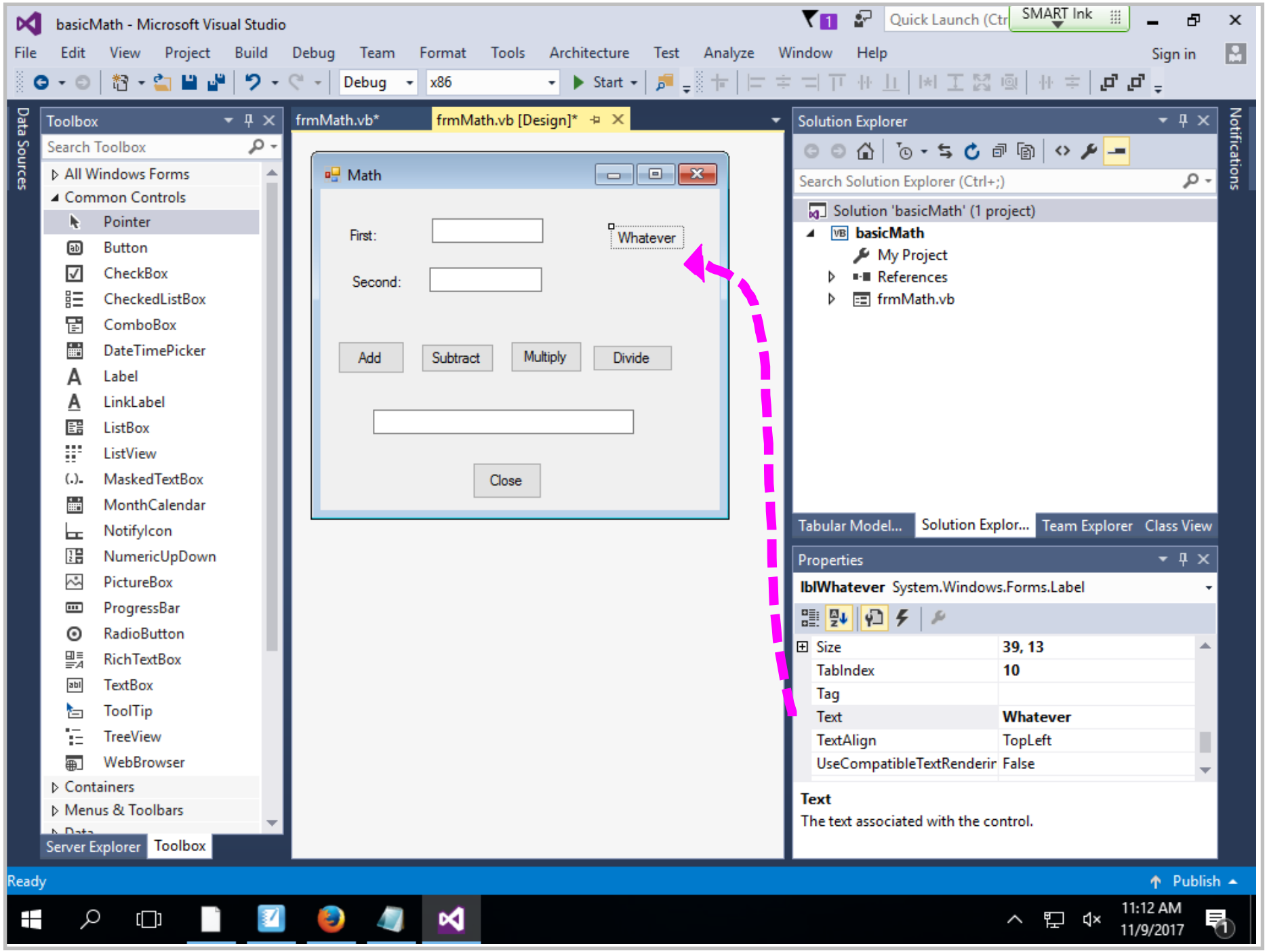
Title: Nov 9-11:06 AM (3 of 39)


basicMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
x86
Start
frmMath.vb
frmMath.vb [Design]
Math
First:
Second:
Add
Subtract
Multiply
Divide
Close
Review
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'basicMath' (1 project)
basicMath
My Project
References
frmMath.vb
Properties
frmMath System.Windows.Forms.Form
btnAdd System.Windows.Forms.Button
btnClose System.Windows.Forms.Button
btnDivide System.Windows.Forms.Button
btnMult System.Windows.Forms.Button
btnSubt System.Windows.Forms.Button
frmMath System.Windows.Forms.Form
lblFirst System.Windows.Forms.Label
lblSecond System.Windows.Forms.Label
txtAns System.Windows.Forms.TextBox
txtFirst System.Windows.Forms.TextBox
txtSecond System.Windows.Forms.TextBox
Capture to new page
Ready
11:10 AM
11/9/2017

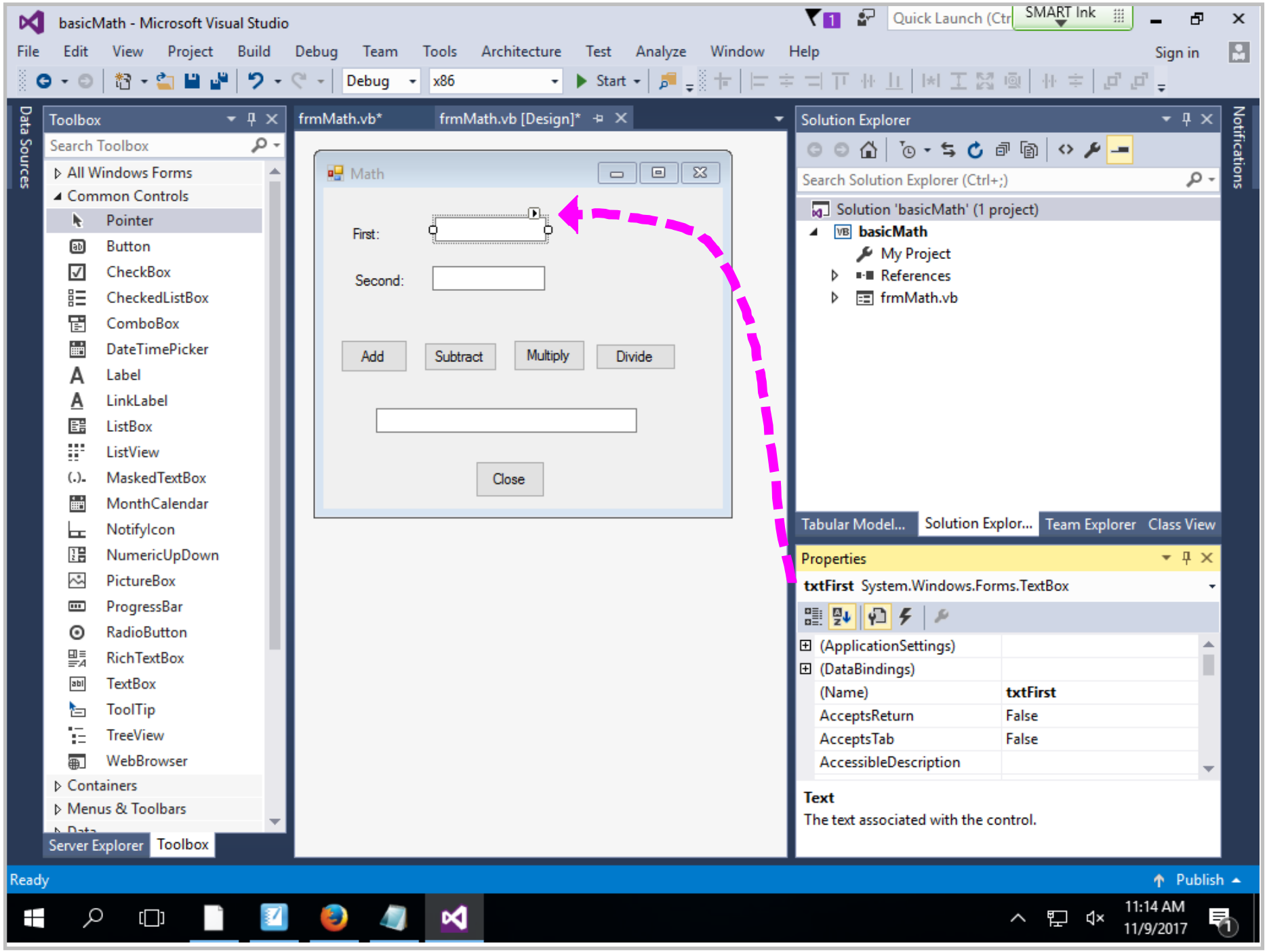


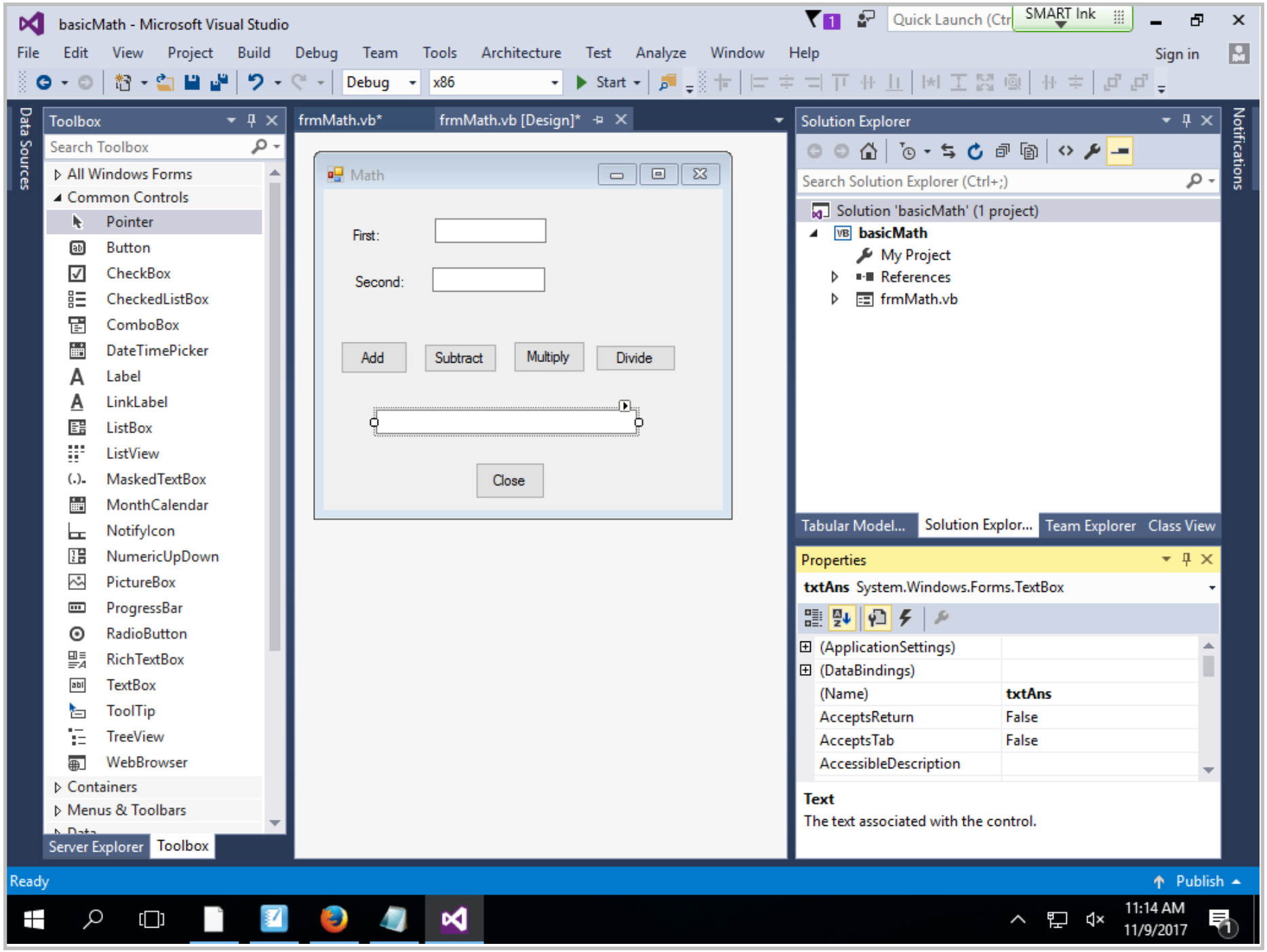
Title: Nov 9-11:11 AM (5 of 39)

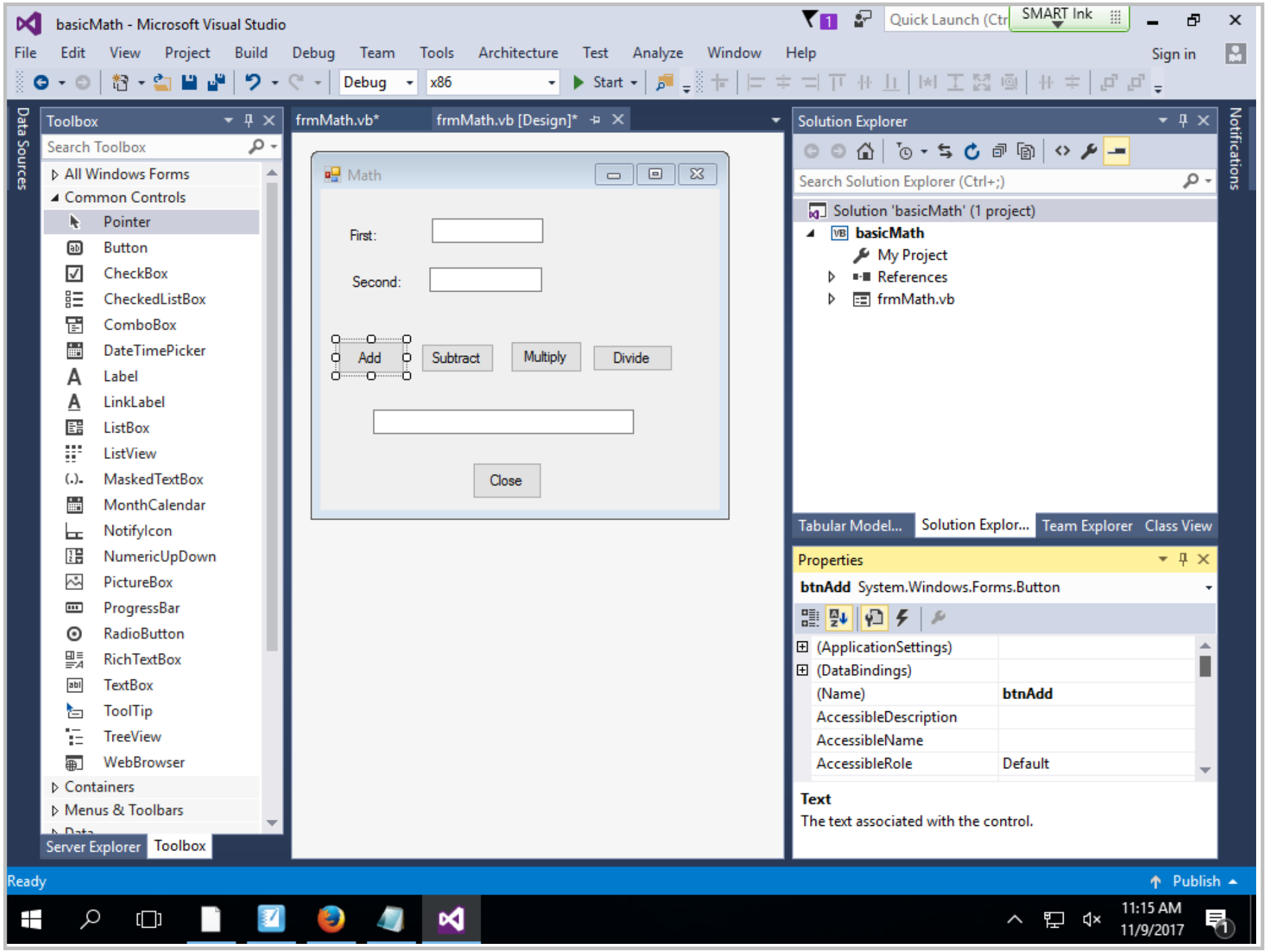

basicMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
x86
Start
Toolbox
Search Toolbox
All Windows Forms
Common Controls
Pointer
Button
CheckBox
CheckedListBox
ComboBox
DateTimePicker
Label
LinkLabel
ListBox
ListView
MaskedTextBox
MonthCalendar
NotifyIcon
NumericUpDown
PictureBox
ProgressBar
RadioButton
RichTextBox
TextBox
ToolTip
TreeView
WebBrowser
Containers
Menus & Toolbars
frmMath.vb*
frmMath.vb [Design]*
Math
First:
Second:
Label1
Add
Subtract
Multiply
Divide
Close
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'basicMath' (1 project)
basicMath
My Project
References
frmMath.vb
Properties
lblWhatever System.Windows.Forms.Label
(ApplicationSettings)
(DataBindings)
(Name) lblWhatever
AccessibleDescription
AccessibleName
AccessibleRole Default
(Name)
Indicates the name used in code to identify the object.
Ready
Publish
11:12 AM
11/9/2017

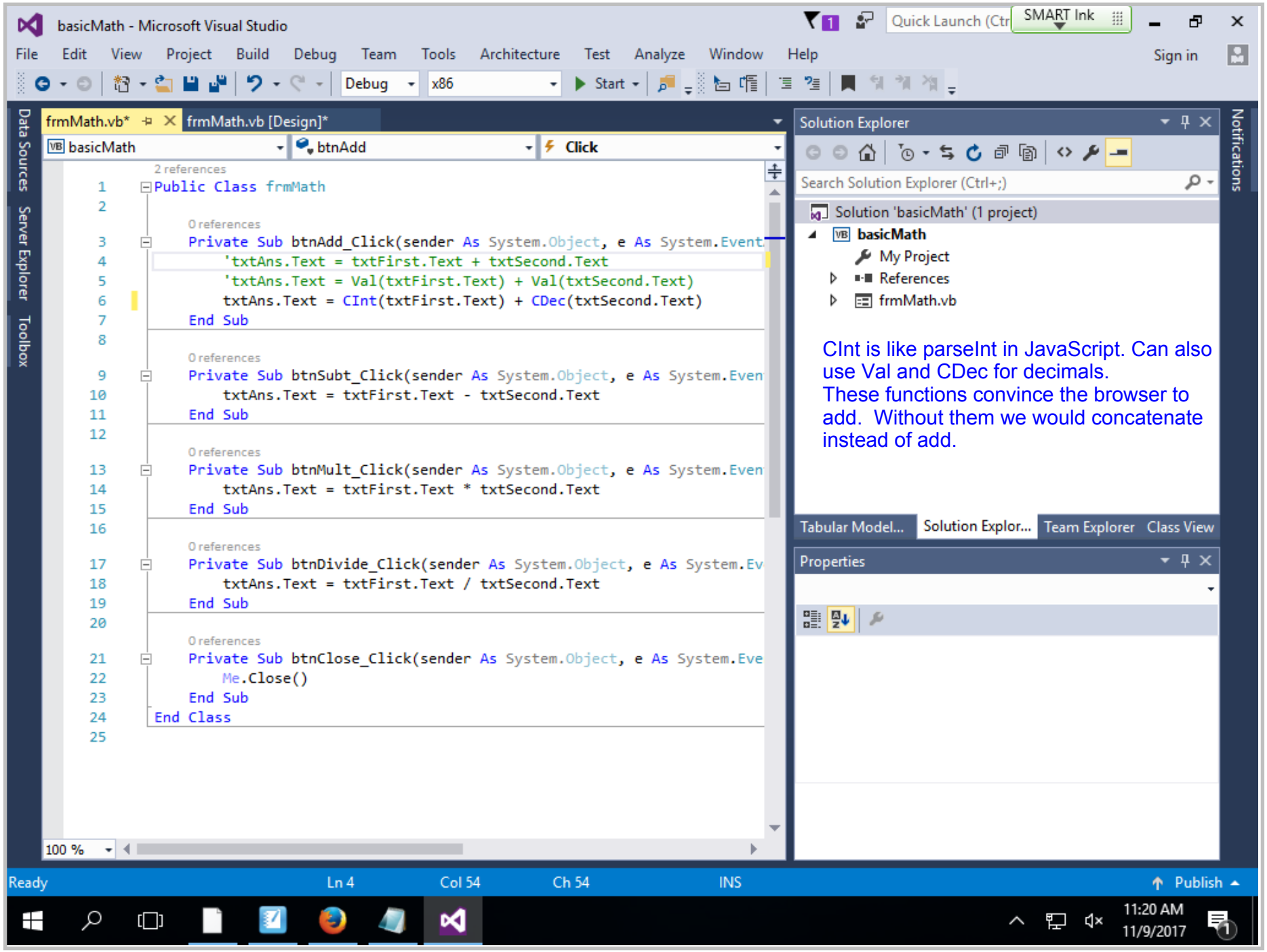


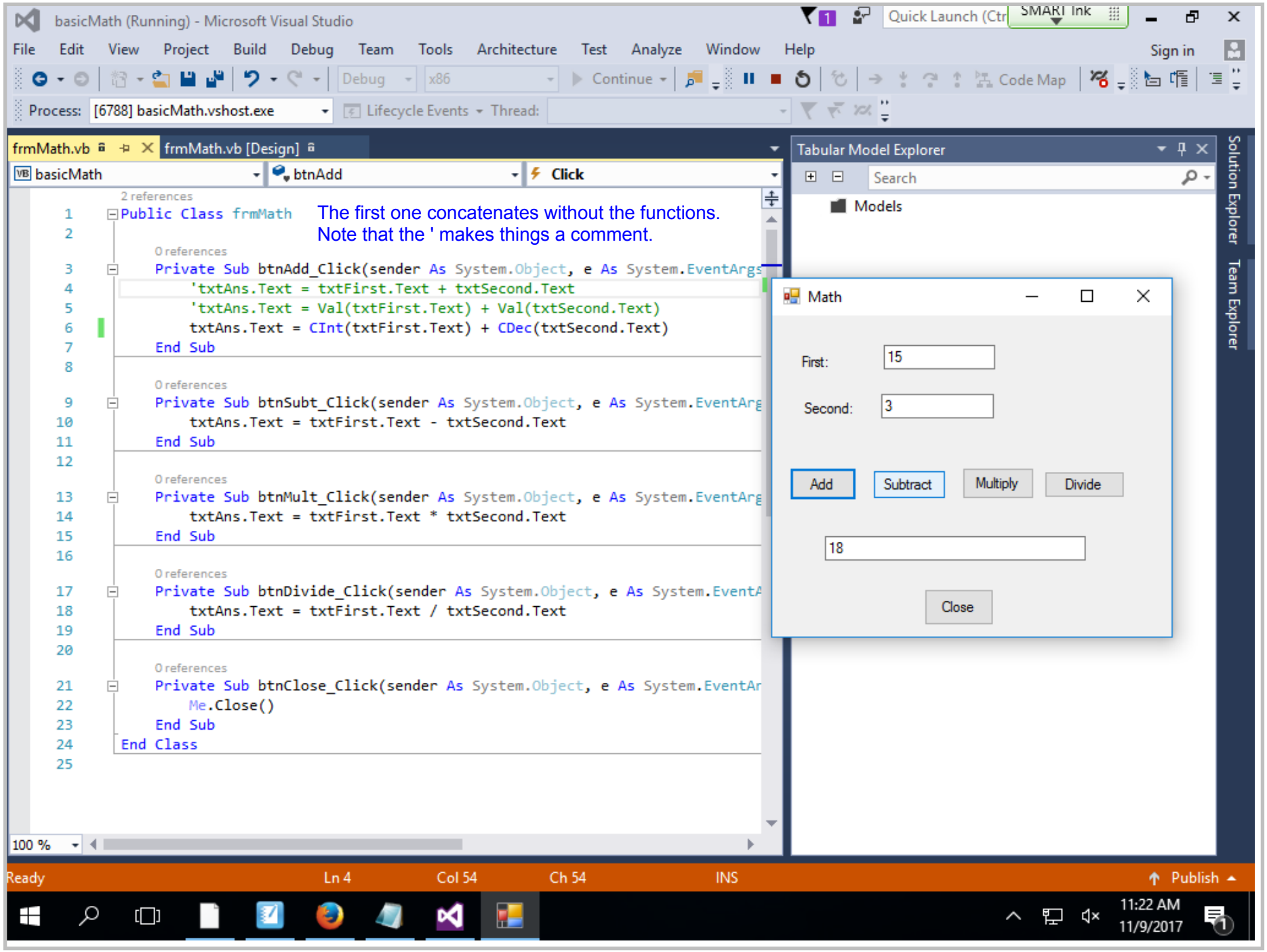
Title: Nov 9-11:12 AM (7 of 39)

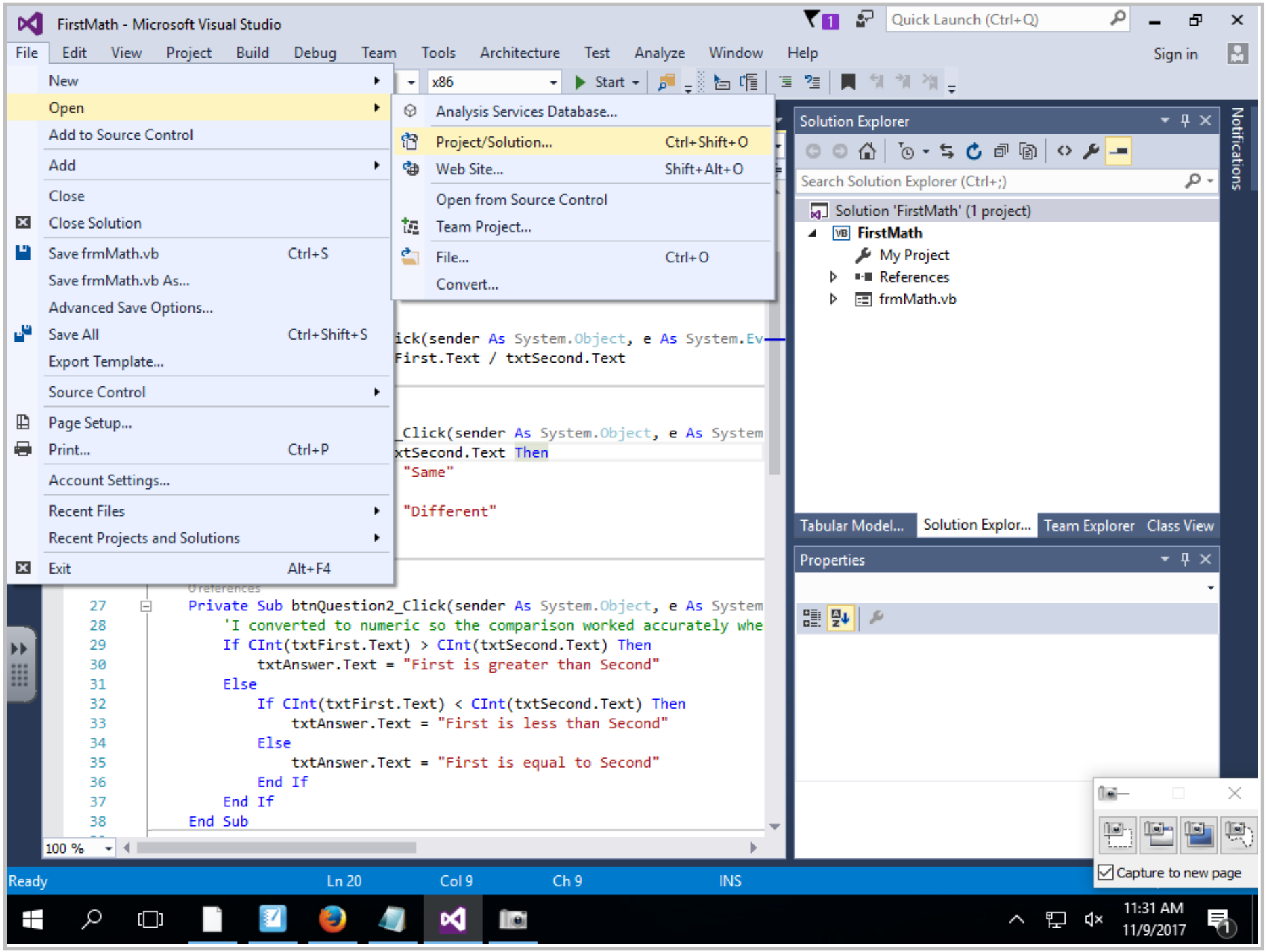

basicMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
x86
Start
Toolbox
Search Toolbox
All Windows Forms
Common Controls
Pointer
Button
CheckBox
CheckedListBox
ComboBox
DateTimePicker
Label
LinkLabel
ListBox
ListView
MaskedTextBox
MonthCalendar
NotifyIcon
NumericUpDown
PictureBox
ProgressBar
RadioButton
RichTextBox
TextBox
ToolTip
TreeView
WebBrowser
Containers
Menus & Toolbars
Server Explorer
Toolbox
frmMath.vb*
frmMath.vb [Design]*
Math
First:
Second:
Add
Subtract
Multiply
Divide
Close
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'basicMath' (1 project)
basicMath
My Project
References
frmMath.vb
Tabular Model...
Solution Explor...
Team Explorer
Class View
Properties
txtFirst System.Windows.Forms.TextBox
(ApplicationSettings)
(DataBindings)
(Name) txtFirst
AcceptsReturn False
AcceptsTab False
AccessibleDescription
Text
The text associated with the control.
Ready
Publish
11:14 AM
11/9/2017

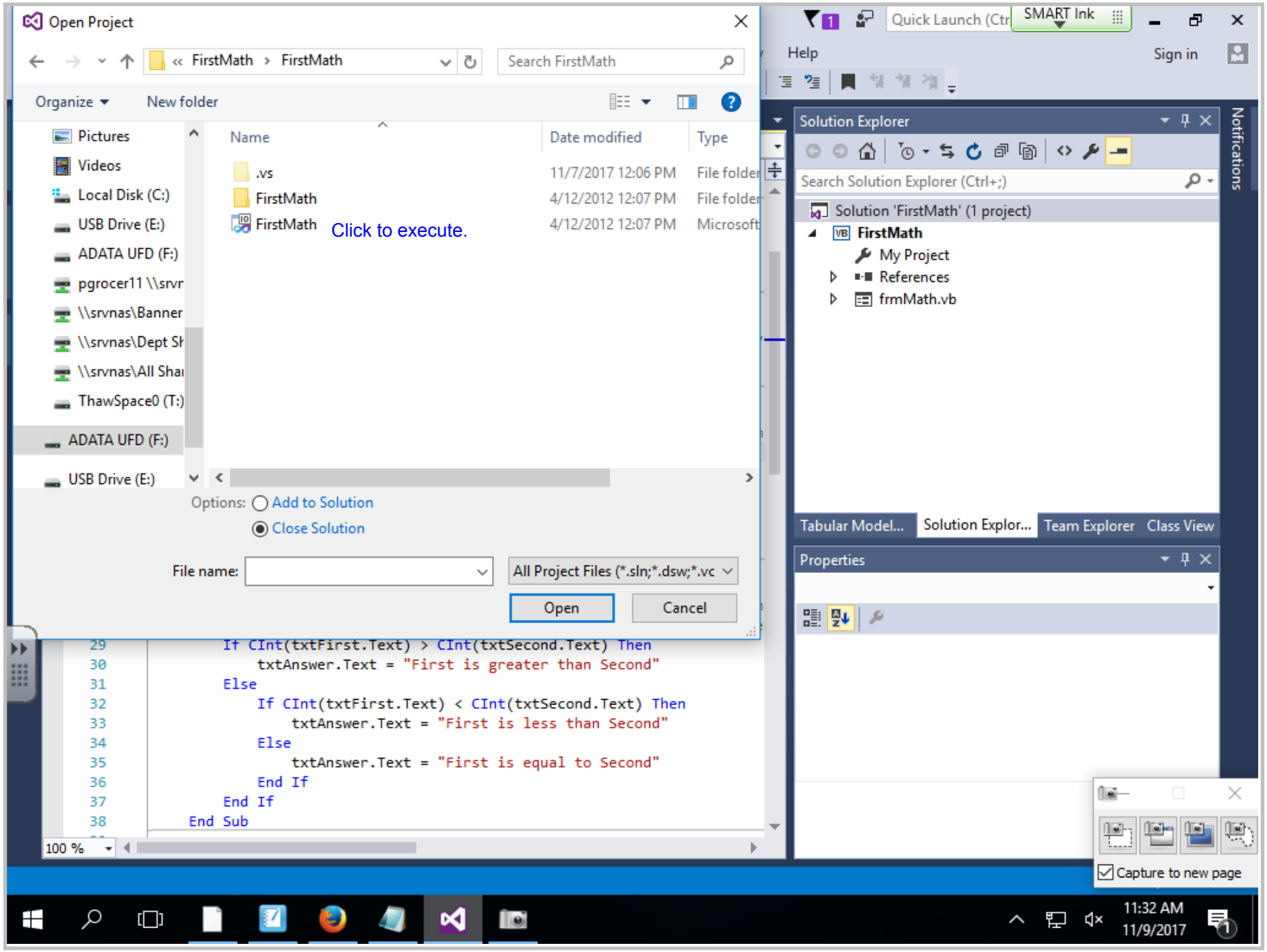

basicMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
x86
Start
Toolbox
Search Toolbox
All Windows Forms
Common Controls
Pointer
Button
CheckBox
CheckedListBox
ComboBox
DateTimePicker
Label
LinkLabel
ListBox
ListView
MaskedTextBox
MonthCalendar
NotifyIcon
NumericUpDown
PictureBox
ProgressBar
RadioButton
RichTextBox
TextBox
ToolTip
TreeView
WebBrowser
Containers
Menus & Toolbars
frmMath.vb*
frmMath.vb [Design]*
Math
First:
Second:
Add
Subtract
Multiply
Divide
Close
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'basicMath' (1 project)
basicMath
My Project
References
frmMath.vb
Properties
txtAns System.Windows.Forms.TextBox
(ApplicationSettings)
(DataBindings)
(Name) txtAns
AcceptsReturn False
AcceptsTab False
AccessibleDescription
Text
The text associated with the control.
Ready
Publish
11:14 AM
11/9/2017


basicMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
x86
Start
Toolbox
Search Toolbox
All Windows Forms
Common Controls
Pointer
Button
CheckBox
CheckedListBox
ComboBox
DateTimePicker
Label
LinkLabel
ListBox
ListView
MaskedTextBox
MonthCalendar
NotifyIcon
NumericUpDown
PictureBox
ProgressBar
RadioButton
RichTextBox
TextBox
ToolTip
TreeView
WebBrowser
Containers
Menus & Toolbars
frmMath.vb*
frmMath.vb [Design]*
Math
First:
Second:
Add
Subtract
Multiply
Divide
Close
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'basicMath' (1 project)
basicMath
My Project
References
frmMath.vb
Properties
btnAdd System.Windows.Forms.Button
(ApplicationSettings)
(DataBindings)
(Name) btnAdd
AccessibleDescription
AccessibleName
AccessibleRole Default
Text
The text associated with the control.
Ready
Publish
11:15 AM
11/9/2017

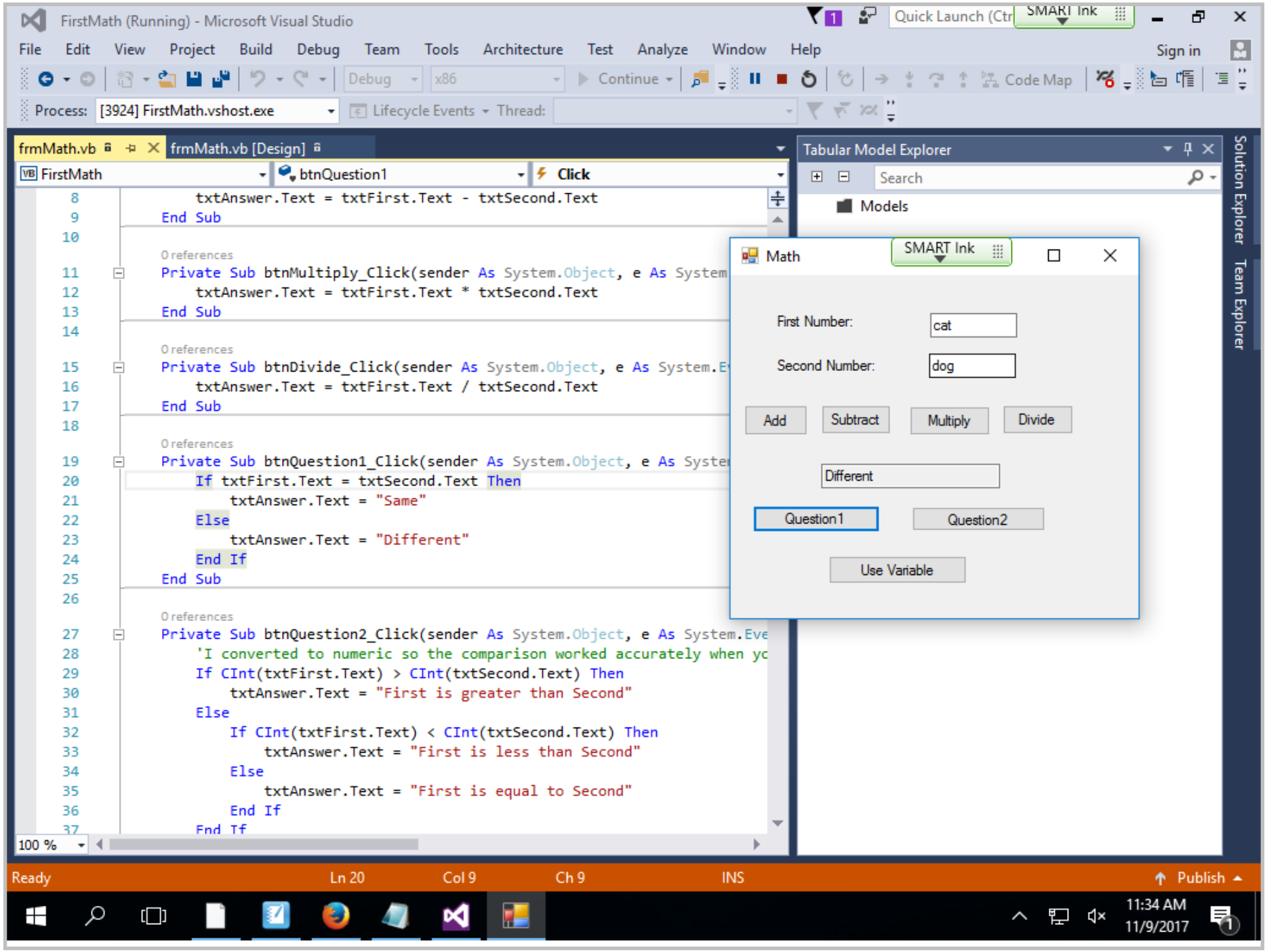

basicMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
x86
Start
frmMath.vb*
frmMath.vb [Design]*
basicMath
btnAdd
Click
2 references
Public Class frmMath
0 references
Private Sub btnAdd_Click(sender As System.Object, e As System.Event
'txtAns.Text = txtFirst.Text + txtSecond.Text
'txtAns.Text = Val(txtFirst.Text) + Val(txtSecond.Text)
txtAns.Text = CInt(txtFirst.Text) + CDec(txtSecond.Text)
End Sub
0 references
Private Sub btnSubt_Click(sender As System.Object, e As System.Even
txtAns.Text = txtFirst.Text - txtSecond.Text
End Sub
0 references
Private Sub btnMult_Click(sender As System.Object, e As System.Even
txtAns.Text = txtFirst.Text * txtSecond.Text
End Sub
0 references
Private Sub btnDivide_Click(sender As System.Object, e As System.Ev
txtAns.Text = txtFirst.Text / txtSecond.Text
End Sub
0 references
Private Sub btnClose_Click(sender As System.Object, e As System.Eve
Me.Close()
End Sub
End Class
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'basicMath' (1 project)
basicMath
My Project
References
frmMath.vb
CInt is like parseInt in JavaScript. Can also use Val and CDec for decimals.
These functions convince the browser to add. Without them we would concatenate instead of add.
Properties
Ready
Ln 4
Col 54
Ch 54
INS
Publish
11:20 AM
11/9/2017

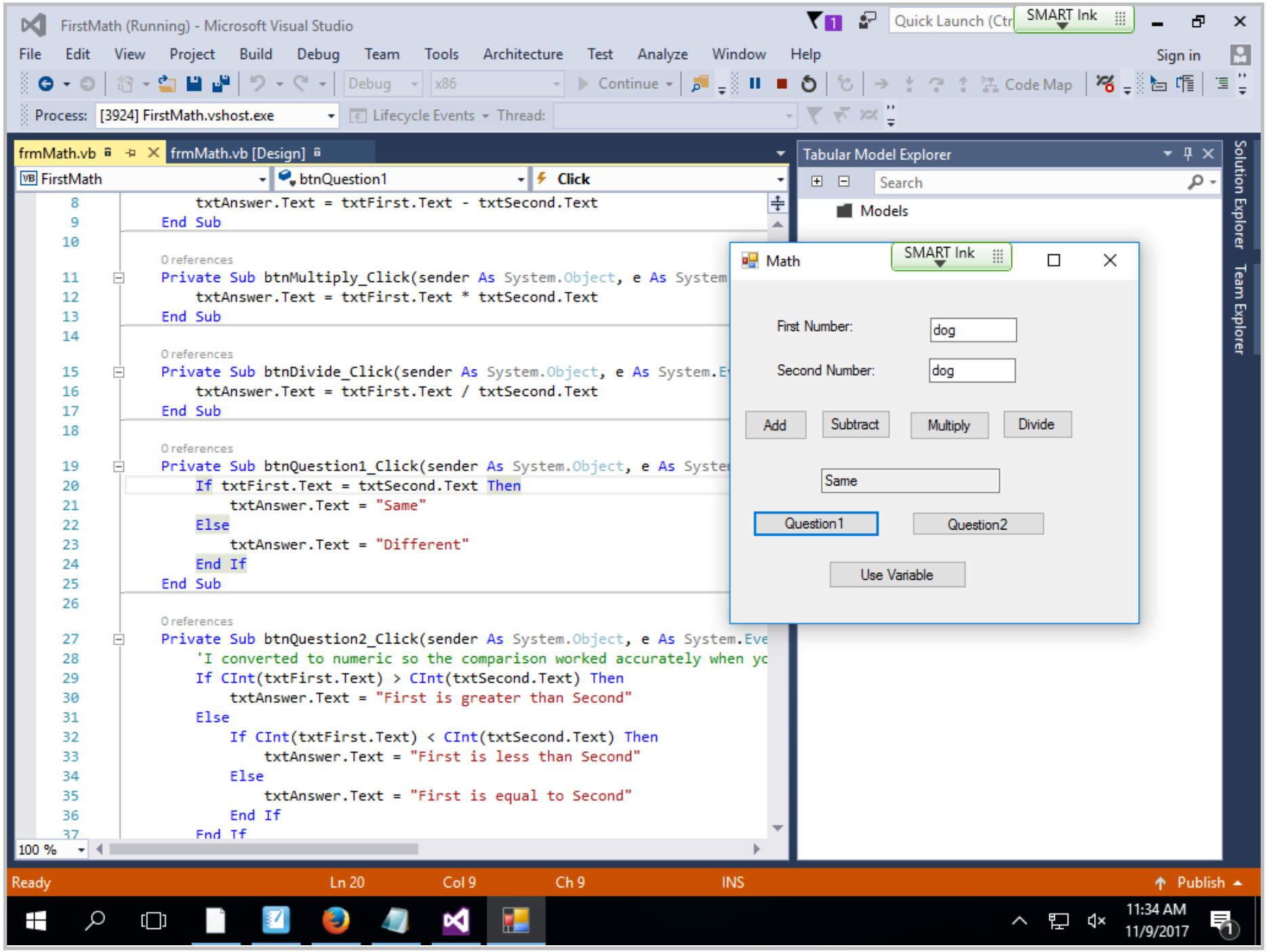

basicMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmMath.vb
frmMath.vb [Design]
basicMath
btnAdd
Click
The first one concatenates without the functions.
Note that the ' makes things a comment.
Public Class frmMath
Private Sub btnAdd_Click(sender As System.Object, e As System.EventArgs
'txtAns.Text = txtFirst.Text + txtSecond.Text
'txtAns.Text = Val(txtFirst.Text) + Val(txtSecond.Text)
txtAns.Text = CInt(txtFirst.Text) + CDec(txtSecond.Text)
End Sub
Private Sub btnSubt_Click(sender As System.Object, e As System.EventArg
txtAns.Text = txtFirst.Text - txtSecond.Text
End Sub
Private Sub btnMult_Click(sender As System.Object, e As System.EventArg
txtAns.Text = txtFirst.Text * txtSecond.Text
End Sub
Private Sub btnDivide_Click(sender As System.Object, e As System.EventA
txtAns.Text = txtFirst.Text / txtSecond.Text
End Sub
Private Sub btnClose_Click(sender As System.Object, e As System.EventAr
Me.Close()
End Sub
End Class
Tabular Model Explorer
Models
Math
First:
15
Second:
3
Add
Subtract
Multiply
Divide
18
Close
Ready
Ln 4
Col 54
Ch 54
INS
Publish
11:22 AM
11/9/2017

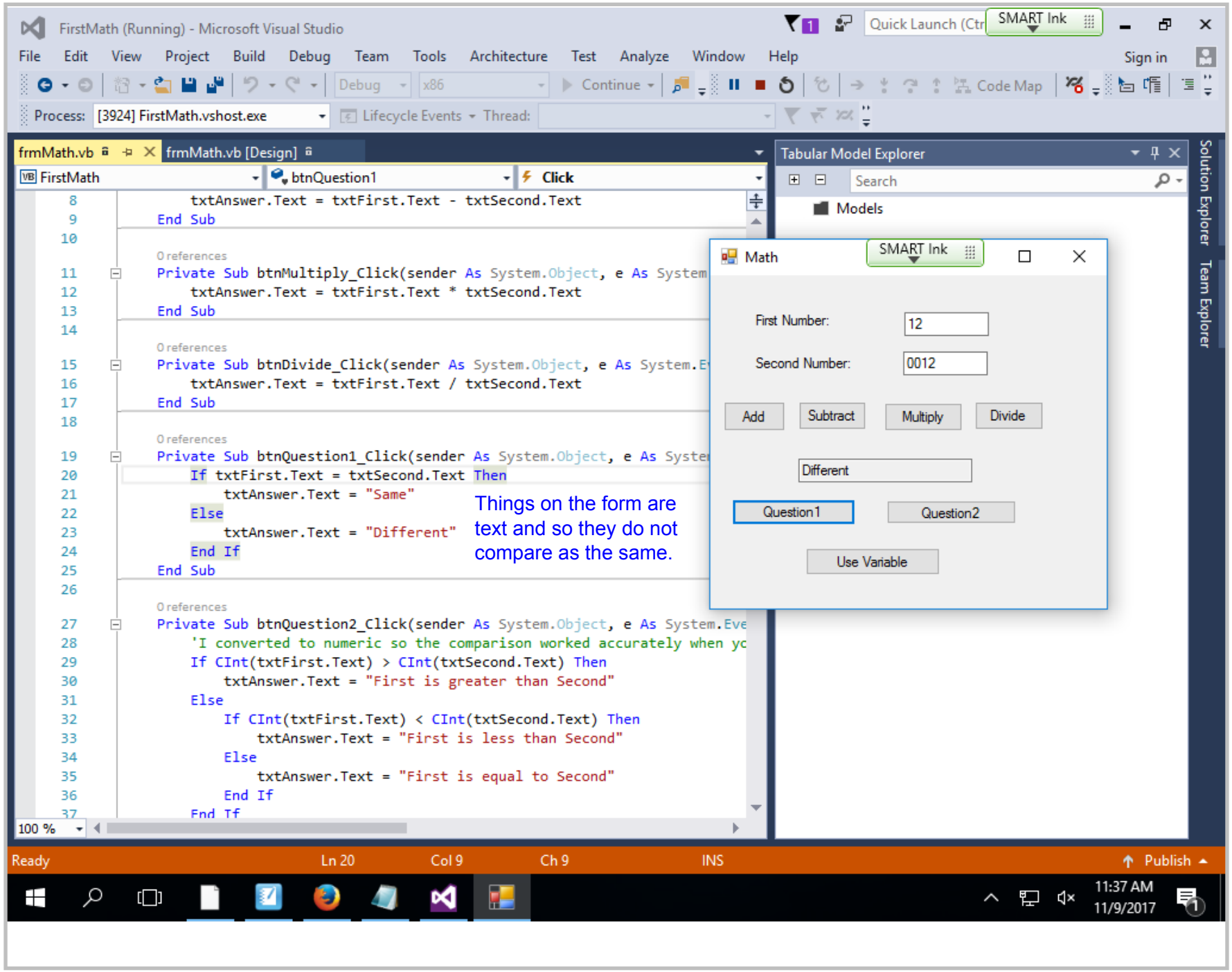

FirstMath - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Sign in
New
Open
Add to Source Control
Add
Close
Close Solution
Save frmMath.vb Ctrl+S
Save frmMath.vb As...
Advanced Save Options...
Save All Ctrl+Shift+S
Export Template...
Source Control
Page Setup...
Print... Ctrl+P
Account Settings...
Recent Files
Recent Projects and Solutions
Exit Alt+F4
Analysis Services Database...
Project/Solution... Ctrl+Shift+O
Web Site... Shift+Alt+O
Open from Source Control
Team Project...
File... Ctrl+O
Convert...
x86
Start
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'FirstMath' (1 project)
FirstMath
My Project
References
frmMath.vb
Tabular Model... Solution Explor... Team Explorer Class View
Properties
Notifications
Private Sub btnQuestion2_Click(sender As System.Object, e As System
'I converted to numeric so the comparison worked accurately whe
If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
txtAnswer.Text = "First is greater than Second"
Else
If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
txtAnswer.Text = "First is less than Second"
Else
txtAnswer.Text = "First is equal to Second"
End If
End If
End Sub
100 %
Ready Ln 20 Col 9 Ch 9 INS
Capture to new page
11:31 AM
11/9/2017

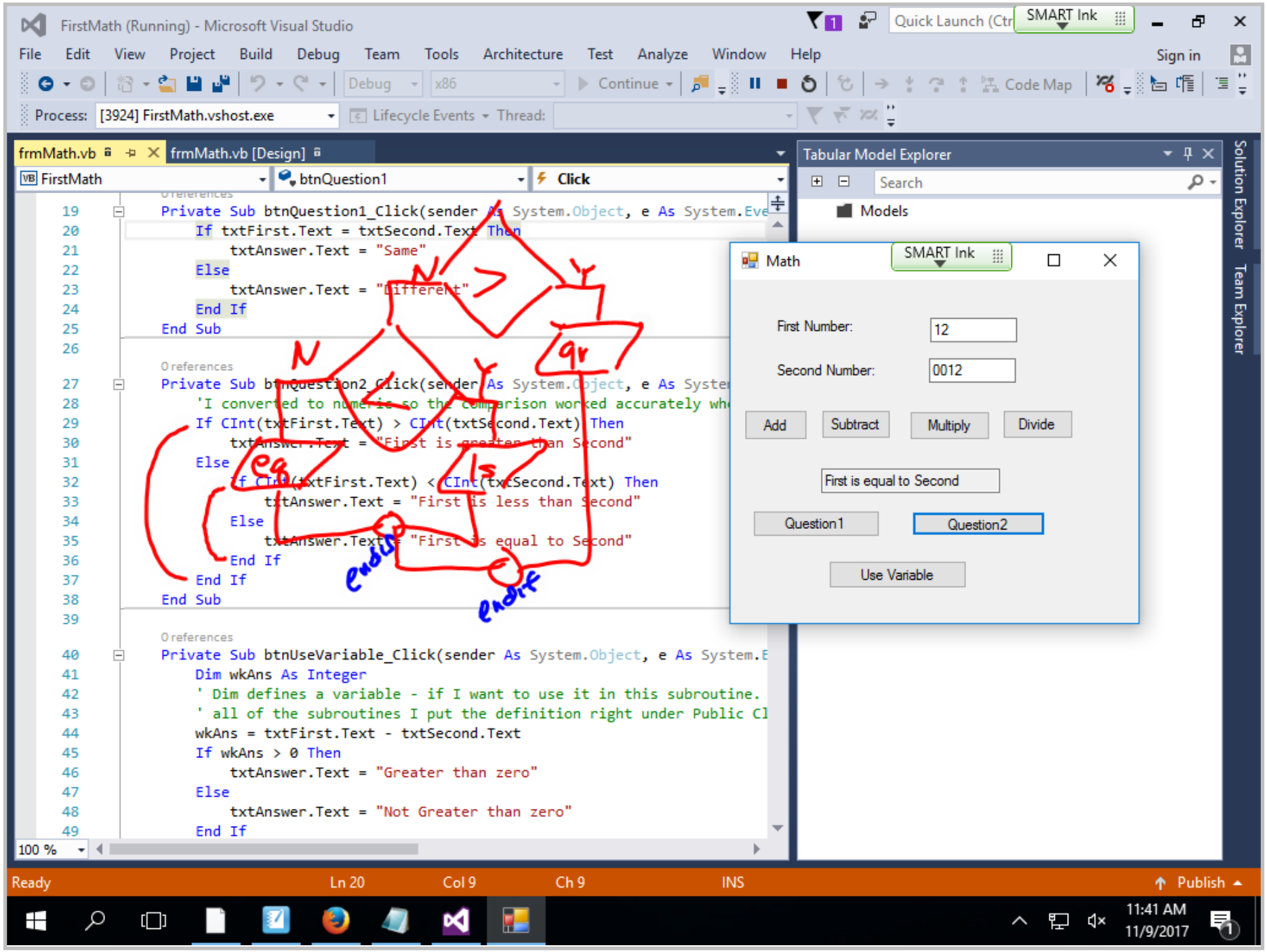


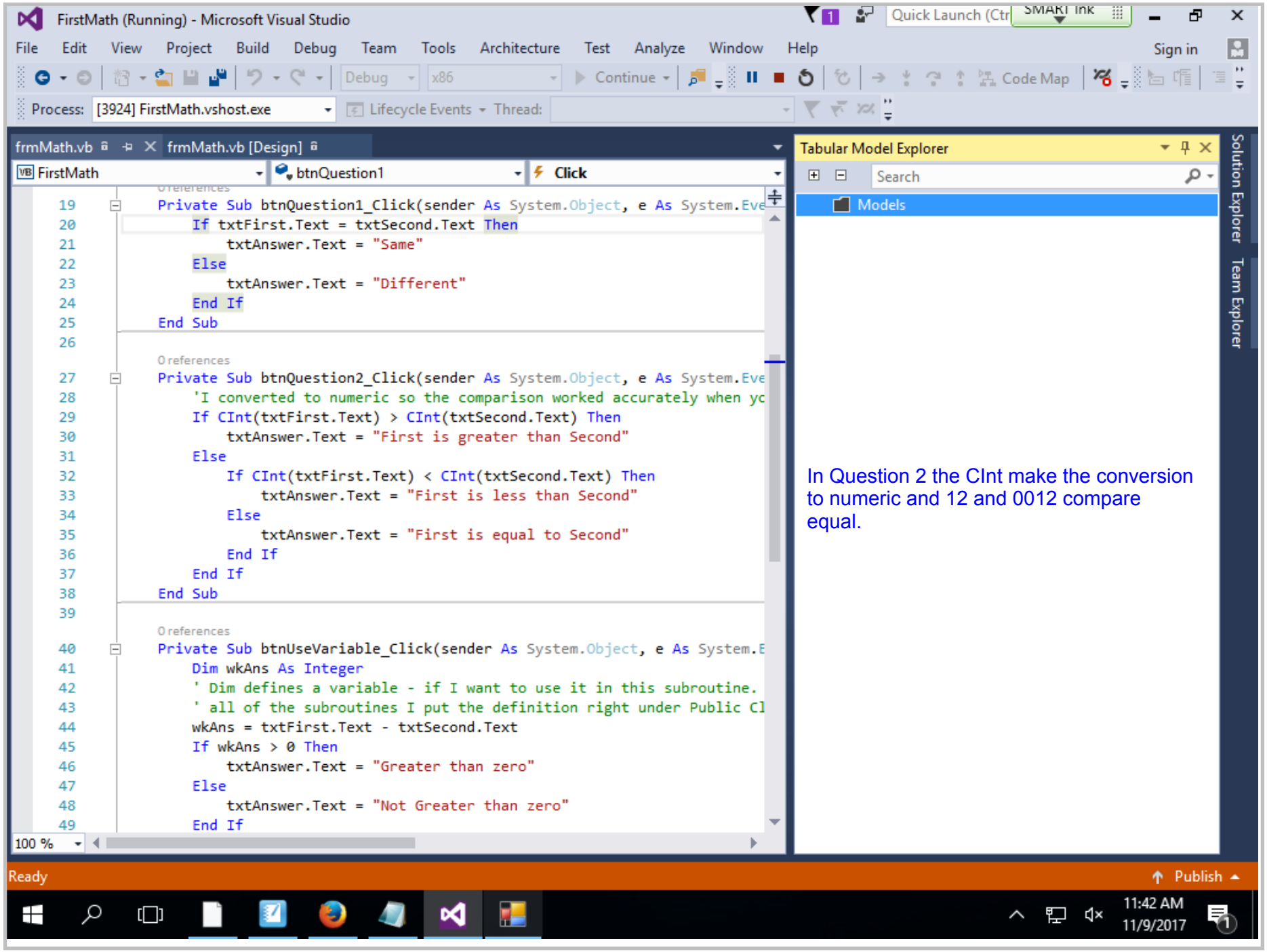
Title: Nov 9-11:32 AM (14 of 39)

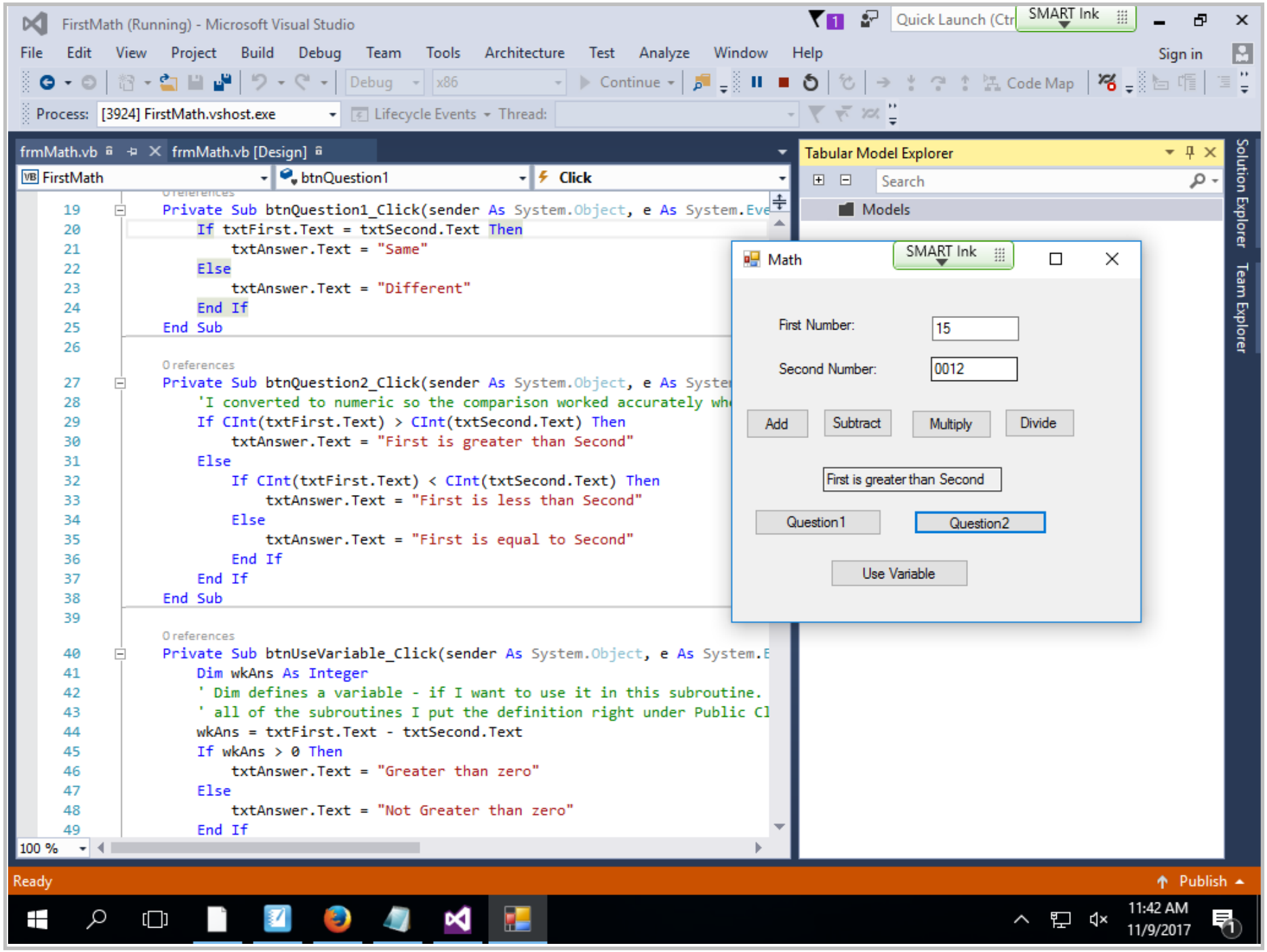

FirstMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug x86 Continue Code Map
Process: [3924] FirstMath.vshost.exe Lifecycle Events Thread:
frmMath.vb frmMath.vb [Design]
FirstMath btnQuestion1 Click
txtAnswer.Text = txtFirst.Text - txtSecond.Text
End Sub
0 references
Private Sub btnMultiply_Click(sender As System.Object, e As System
txtAnswer.Text = txtFirst.Text * txtSecond.Text
End Sub
0 references
Private Sub btnDivide_Click(sender As System.Object, e As System.E
txtAnswer.Text = txtFirst.Text / txtSecond.Text
End Sub
0 references
Private Sub btnQuestion1_Click(sender As System.Object, e As Syste
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = "Different"
End If
End Sub
0 references
Private Sub btnQuestion2_Click(sender As System.Object, e As System.Eve
'I converted to numeric so the comparison worked accurately when yc
If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
txtAnswer.Text = "First is greater than Second"
Else
If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
txtAnswer.Text = "First is less than Second"
Else
txtAnswer.Text = "First is equal to Second"
End If
End If
100 %
Tabular Model Explorer
Search
Models
Math
SMART Ink
First Number:
cat
Second Number:
dog
Add
Subtract
Multiply
Divide
Different
Question1
Question2
Use Variable
Solution Explorer
Team Explorer
Ready Ln 20 Col 9 Ch 9 INS
Publish
11:34 AM
11/9/2017


FirstMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmMath.vb
frmMath.vb [Design]
FirstMath
btnQuestion1
Click
txtAnswer.Text = txtFirst.Text - txtSecond.Text
End Sub
0 references
Private Sub btnMultiply_Click(sender As System.Object, e As System
txtAnswer.Text = txtFirst.Text * txtSecond.Text
End Sub
0 references
Private Sub btnDivide_Click(sender As System.Object, e As System.E
txtAnswer.Text = txtFirst.Text / txtSecond.Text
End Sub
0 references
Private Sub btnQuestion1_Click(sender As System.Object, e As Syste
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = "Different"
End If
End Sub
0 references
Private Sub btnQuestion2_Click(sender As System.Object, e As System.Eve
'I converted to numeric so the comparison worked accurately when yc
If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
txtAnswer.Text = "First is greater than Second"
Else
If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
txtAnswer.Text = "First is less than Second"
Else
txtAnswer.Text = "First is equal to Second"
End If
End If
Tabular Model Explorer
Search
Models
Math
SMART Ink
First Number:
dog
Second Number:
dog
Add
Subtract
Multiply
Divide
Same
Question1
Question2
Use Variable
Solution Explorer
Team Explorer
Ready
Ln 20
Col 9
Ch 9
INS
Publish
11:34 AM
11/9/2017

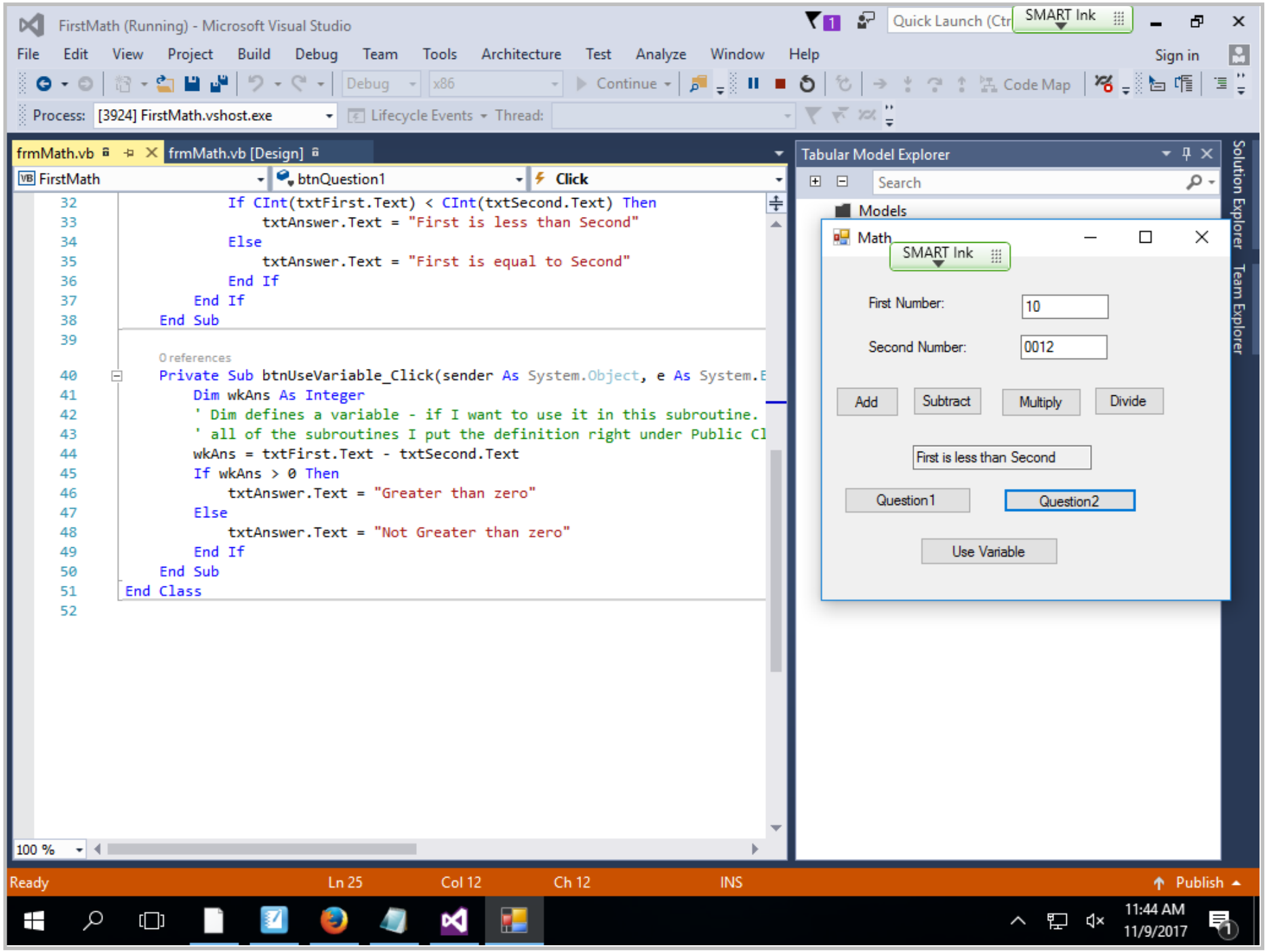

FirstMath (Running) - Microsoft Visual Studio
frmMath.vb
frmMath.vb [Design]
FirstMath
btnQuestion1
Click
txtAnswer.Text = txtFirst.Text - txtSecond.Text
End Sub
0 references
Private Sub btnMultiply_Click(sender As System.Object, e As System
txtAnswer.Text = txtFirst.Text * txtSecond.Text
End Sub
0 references
Private Sub btnDivide_Click(sender As System.Object, e As System.E
txtAnswer.Text = txtFirst.Text / txtSecond.Text
End Sub
0 references
Private Sub btnQuestion1_Click(sender As System.Object, e As Syste
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = "Different"
End If
End Sub
0 references
Private Sub btnQuestion2_Click(sender As System.Object, e As System.Eve
'I converted to numeric so the comparison worked accurately when yc
If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
txtAnswer.Text = "First is greater than Second"
Else
If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
txtAnswer.Text = "First is less than Second"
Else
txtAnswer.Text = "First is equal to Second"
End If
End If
Things on the form are text and so they do not compare as the same.
Tabular Model Explorer
Models
Math
First Number:
12
Second Number:
0012
Add
Subtract
Multiply
Divide
Different
Question1
Question2
Use Variable
Ready
Ln 20
Col 9
Ch 9
INS
Publish
11:37 AM
11/9/2017


FirstMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmMath.vb
frmMath.vb [Design]
FirstMath
btnQuestion1
Click
Private Sub btnQuestion1_Click(sender As System.Object, e As System.Eve
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = "Different"
End If
End Sub
0 references
Private Sub btnQuestion2_Click(sender As System.Object, e As Syste
'I converted to numeric so the comparison worked accurately wh
If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
txtAnswer.Text = "First is greater than Second"
Else
If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
txtAnswer.Text = "First is less than Second"
Else
txtAnswer.Text = "First is equal to Second"
End If
End If
End Sub
0 references
Private Sub btnUseVariable_Click(sender As System.Object, e As System.E
Dim wkAns As Integer
' Dim defines a variable - if I want to use it in this subroutine.
' all of the subroutines I put the definition right under Public Cl
wkAns = txtFirst.Text - txtSecond.Text
If wkAns > 0 Then
txtAnswer.Text = "Greater than zero"
Else
txtAnswer.Text = "Not Greater than zero"
End If
Tabular Model Explorer
Search
Models
Math
SMART Ink
First Number:
12
Second Number:
0012
Add
Subtract
Multiply
Divide
First is equal to Second
Question1
Question2
Use Variable
Solution Explorer
Team Explorer
Ready
Ln 20
Col 9
Ch 9
INS
Publish
11:41 AM
11/9/2017

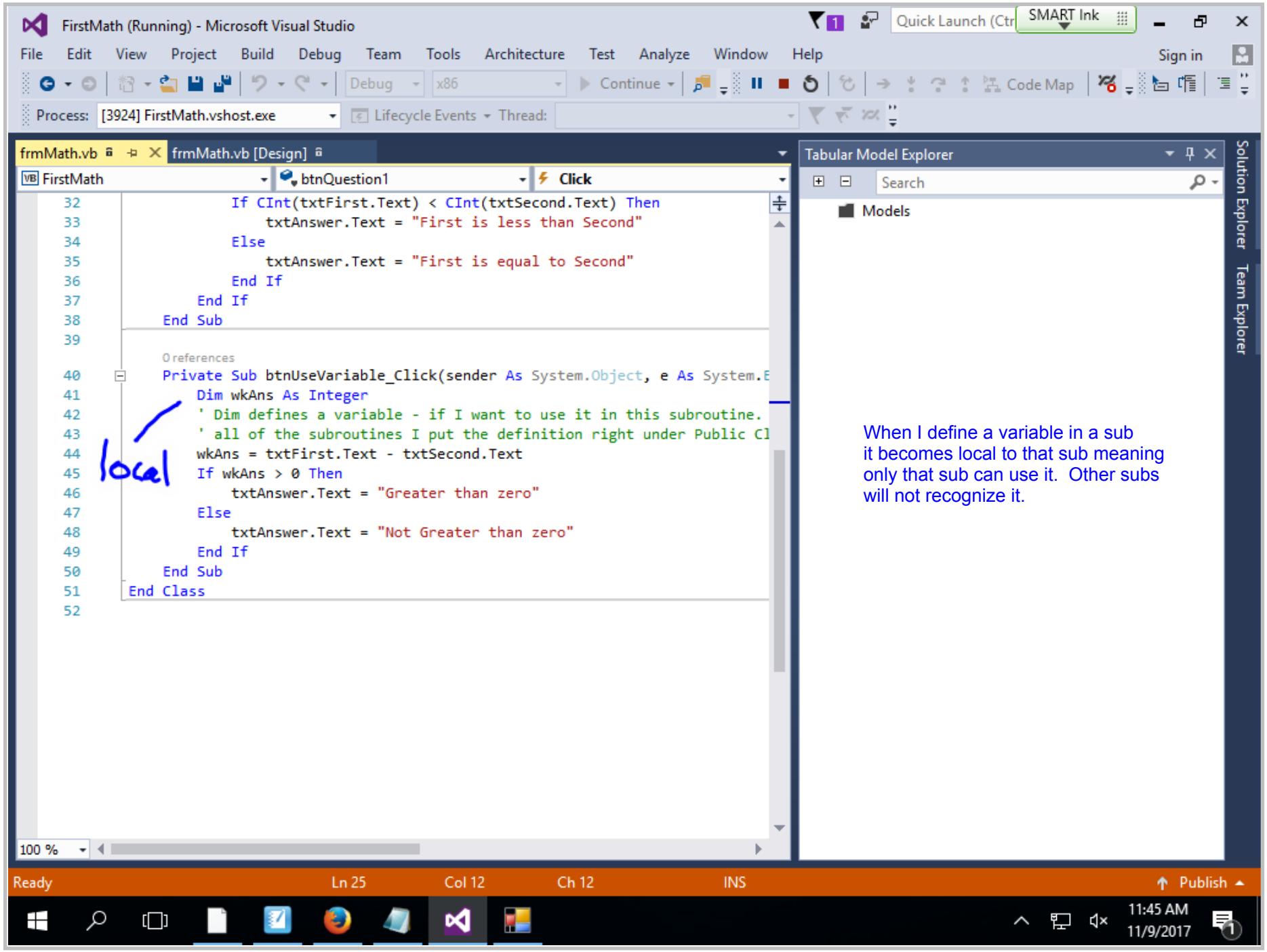

FirstMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Sign in
Debug
x86
Continue
Code Map
Process: [3924] FirstMath.vshost.exe
Lifecycle Events
Thread:
frmMath.vb
frmMath.vb [Design]
FirstMath
btnQuestion1
Click
Private Sub btnQuestion1_Click(sender As System.Object, e As System.Eve
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = "Different"
End If
End Sub
0 references
Private Sub btnQuestion2_Click(sender As System.Object, e As System.Eve
'I converted to numeric so the comparison worked accurately when yc
If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
txtAnswer.Text = "First is greater than Second"
Else
If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
txtAnswer.Text = "First is less than Second"
Else
txtAnswer.Text = "First is equal to Second"
End If
End If
End Sub
0 references
Private Sub btnUseVariable_Click(sender As System.Object, e As System.E
Dim wkAns As Integer
' Dim defines a variable - if I want to use it in this subroutine.
' all of the subroutines I put the definition right under Public Cl
wkAns = txtFirst.Text - txtSecond.Text
If wkAns > 0 Then
txtAnswer.Text = "Greater than zero"
Else
txtAnswer.Text = "Not Greater than zero"
End If
100 %
Tabular Model Explorer
Search
Models
In Question 2 the CInt make the conversion to numeric and 12 and 0012 compare equal.
Solution Explorer
Team Explorer
Ready
Publish
11:42 AM
11/9/2017

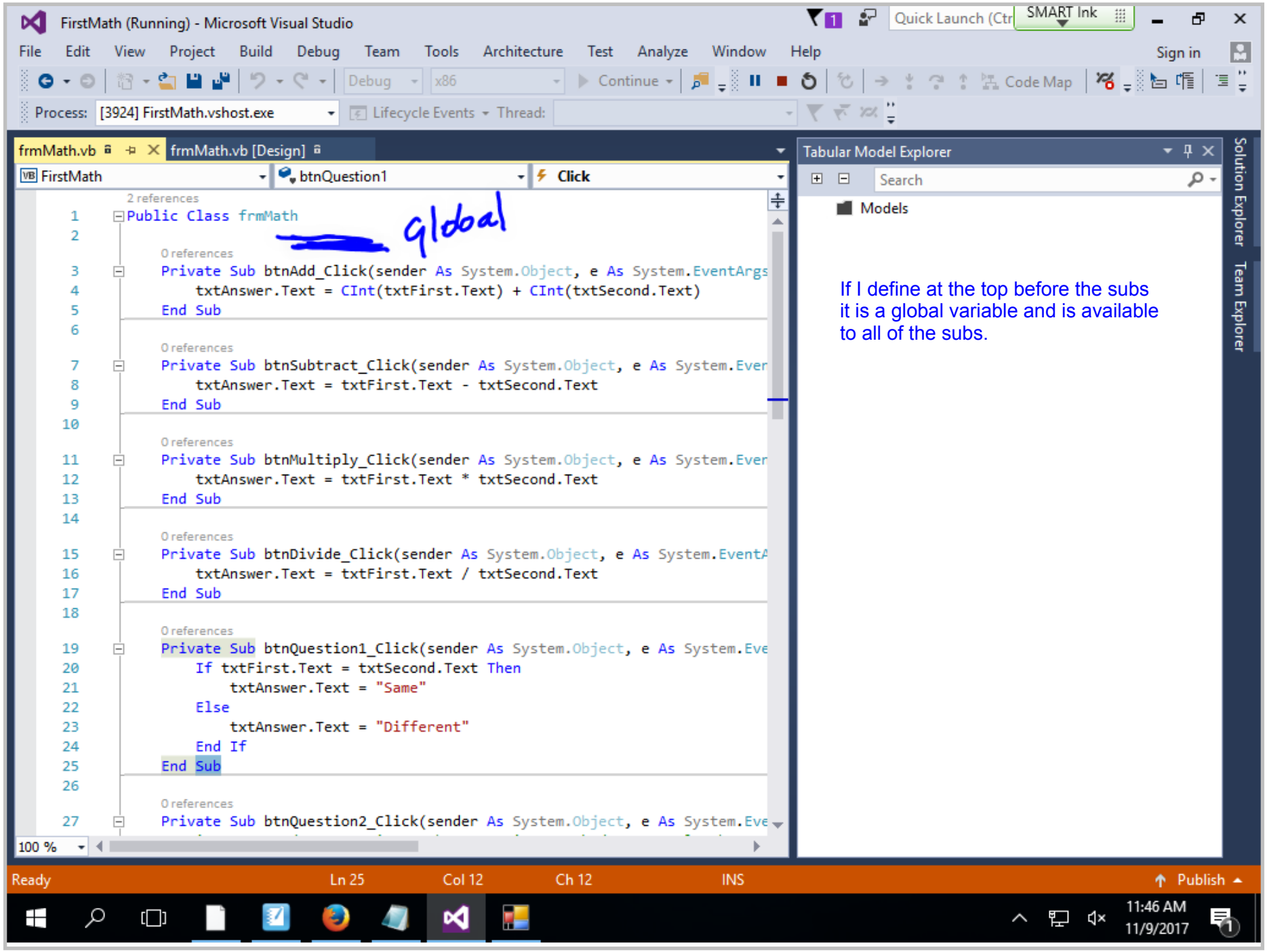


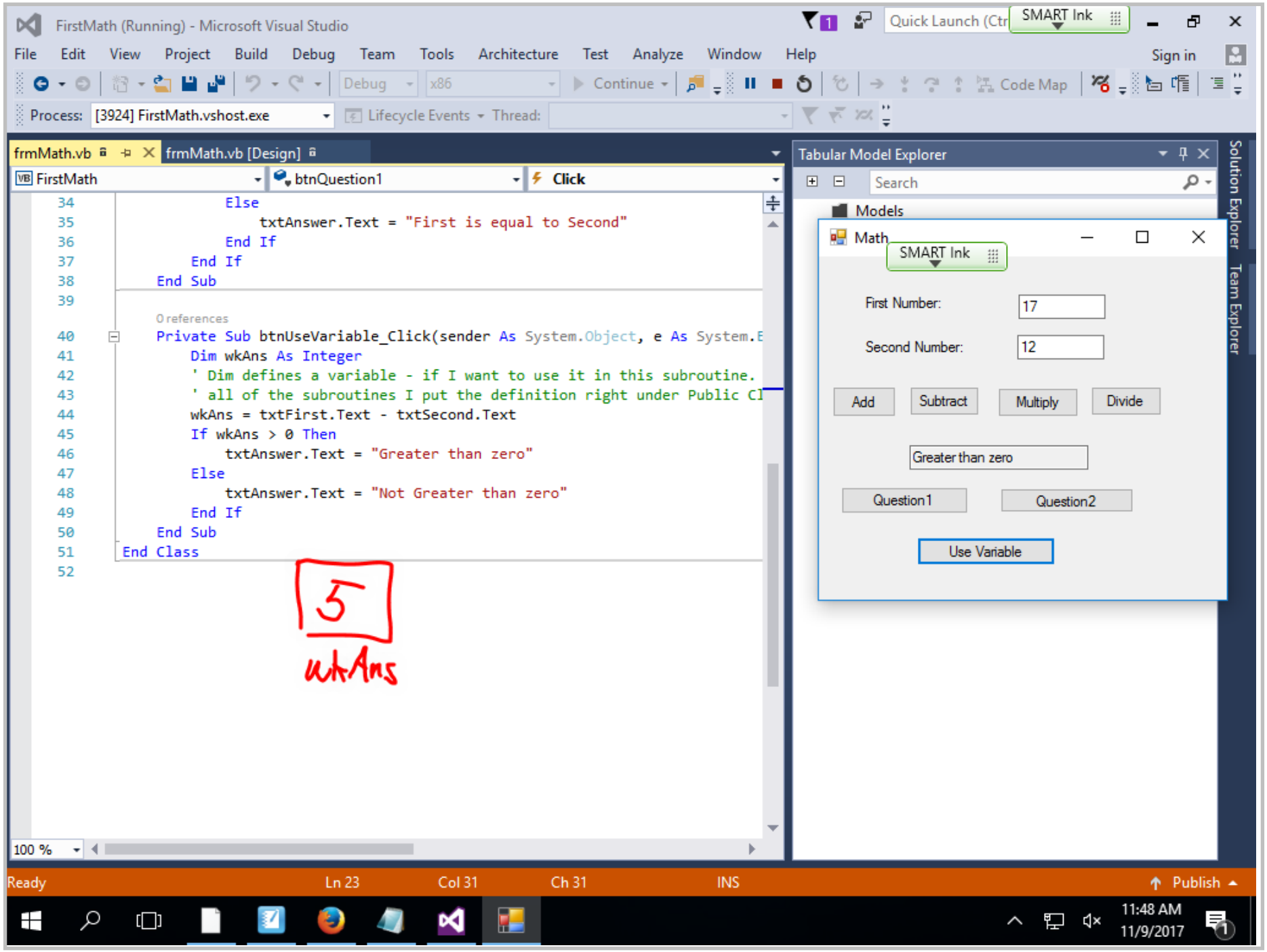
Title: Nov 9-11:42 AM (20 of 39)

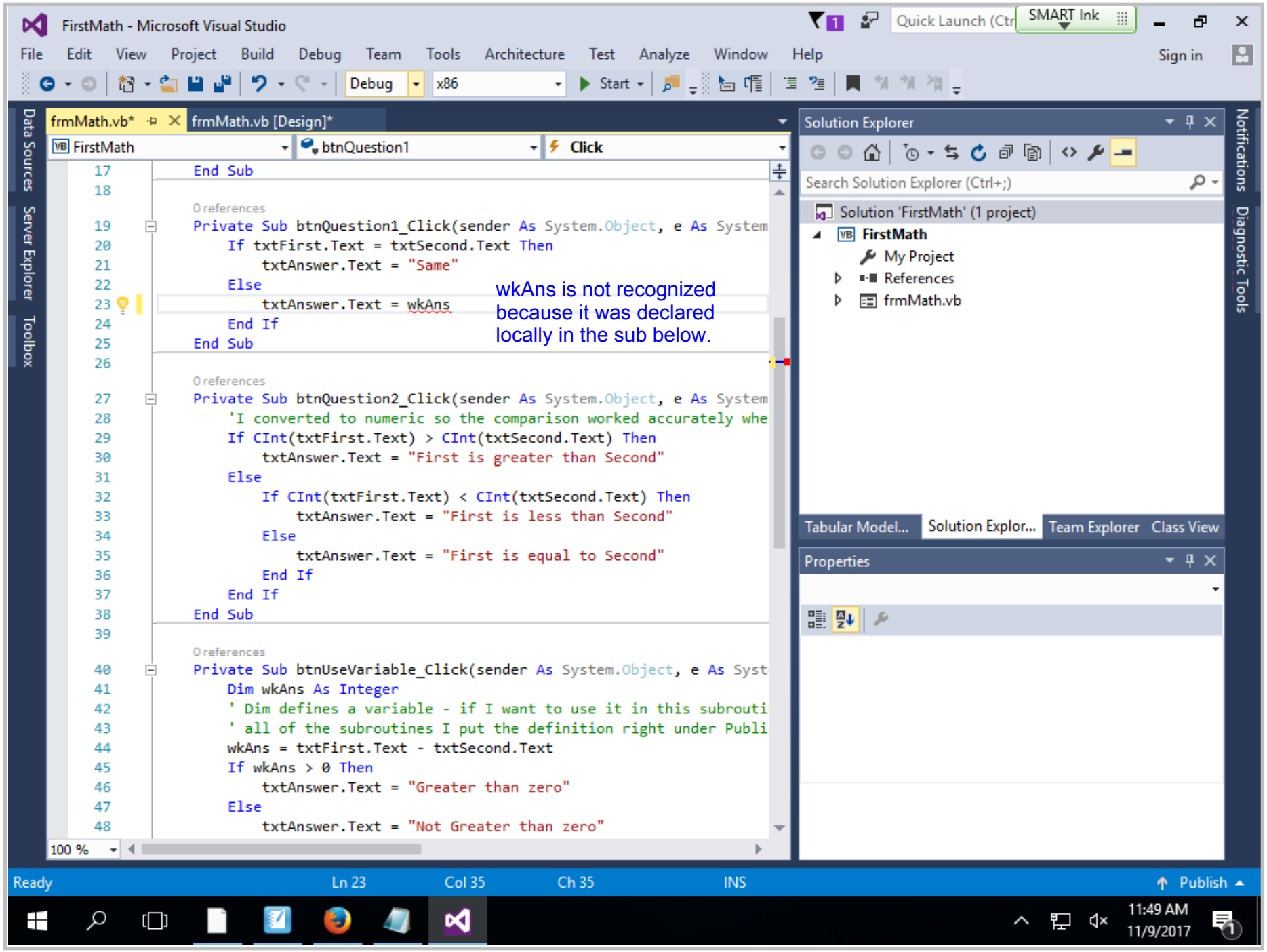


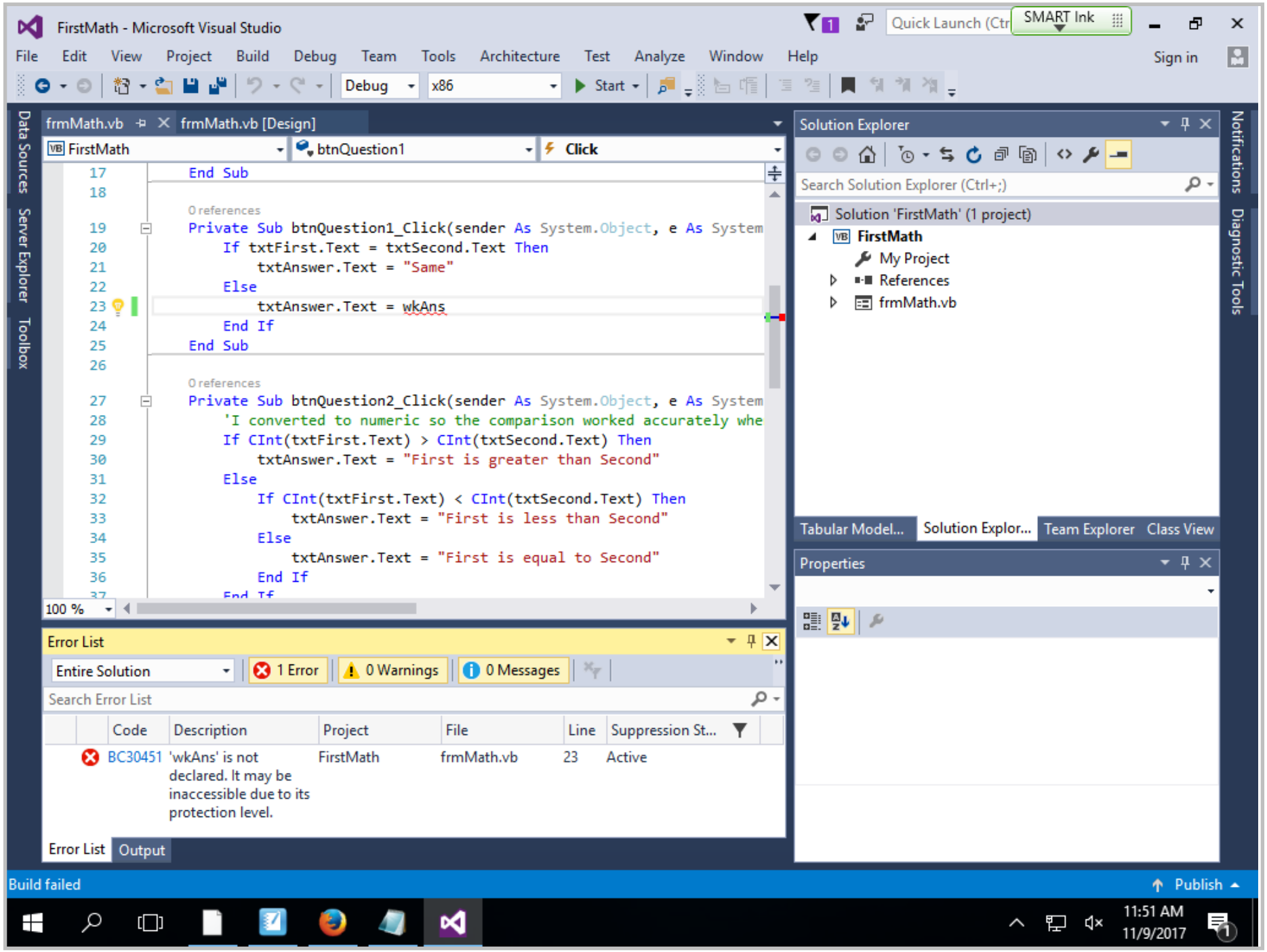
Title: Nov 9-11:44 AM (21 of 39)

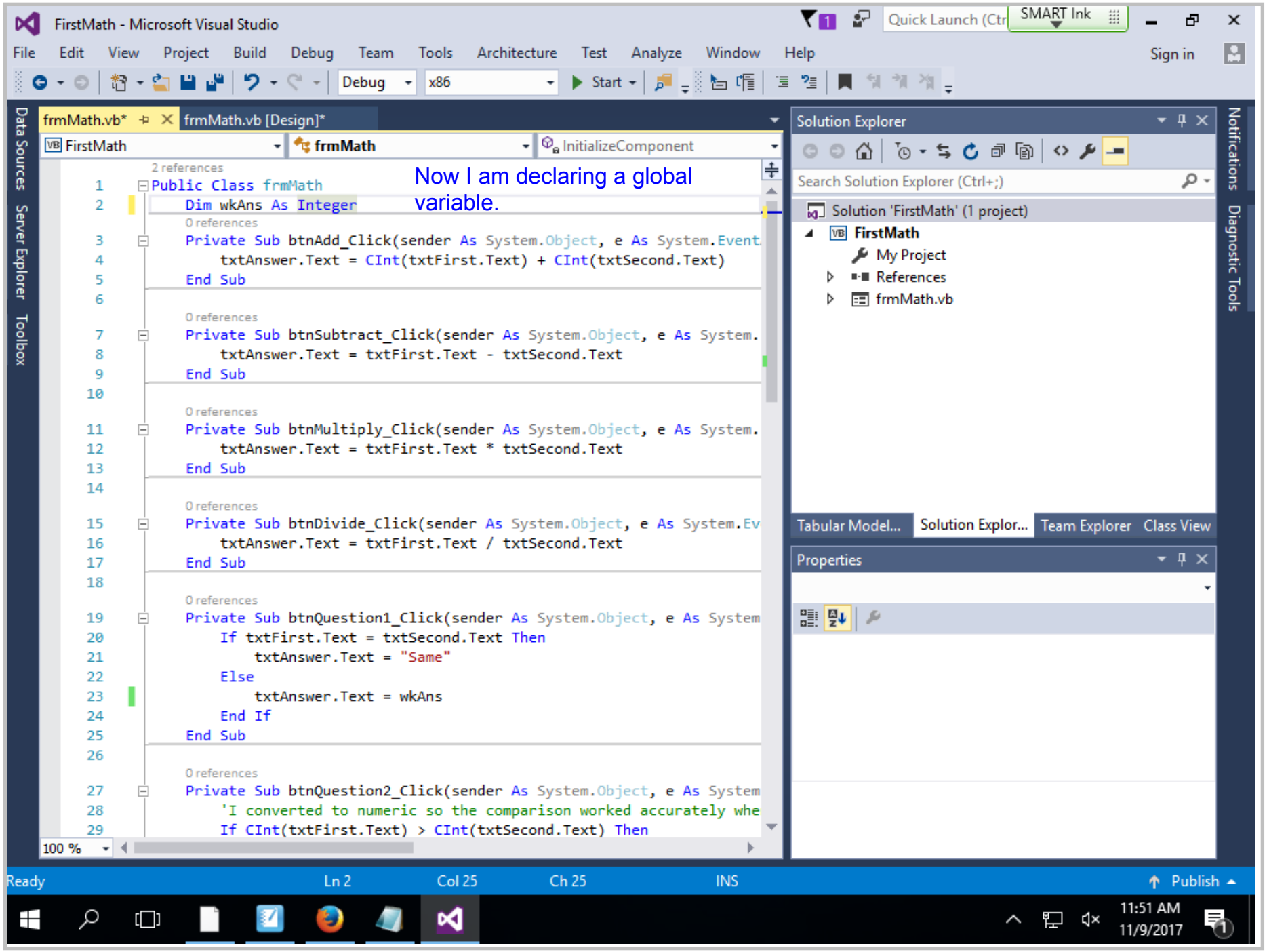

FirstMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmMath.vb
frmMath.vb [Design]
FirstMath
btnQuestion1
Click
32 If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
33 txtAnswer.Text = "First is less than Second"
34 Else
35 txtAnswer.Text = "First is equal to Second"
36 End If
37 End If
38 End Sub
39
0 references
40 Private Sub btnUseVariable_Click(sender As System.Object, e As System.E
41 Dim wkAns As Integer
42 ' Dim defines a variable - if I want to use it in this subroutine.
43 ' all of the subroutines I put the definition right under Public Cl
44 wkAns = txtFirst.Text - txtSecond.Text
45 If wkAns > 0 Then
46 txtAnswer.Text = "Greater than zero"
47 Else
48 txtAnswer.Text = "Not Greater than zero"
49 End If
50 End Sub
51 End Class
52
local
Tabular Model Explorer
Search
Models
When I define a variable in a sub
it becomes local to that sub meaning
only that sub can use it. Other subs
will not recognize it.
Solution Explorer
Team Explorer
100 %
Ready
Ln 25
Col 12
Ch 12
INS
Publish
11:45 AM
11/9/2017

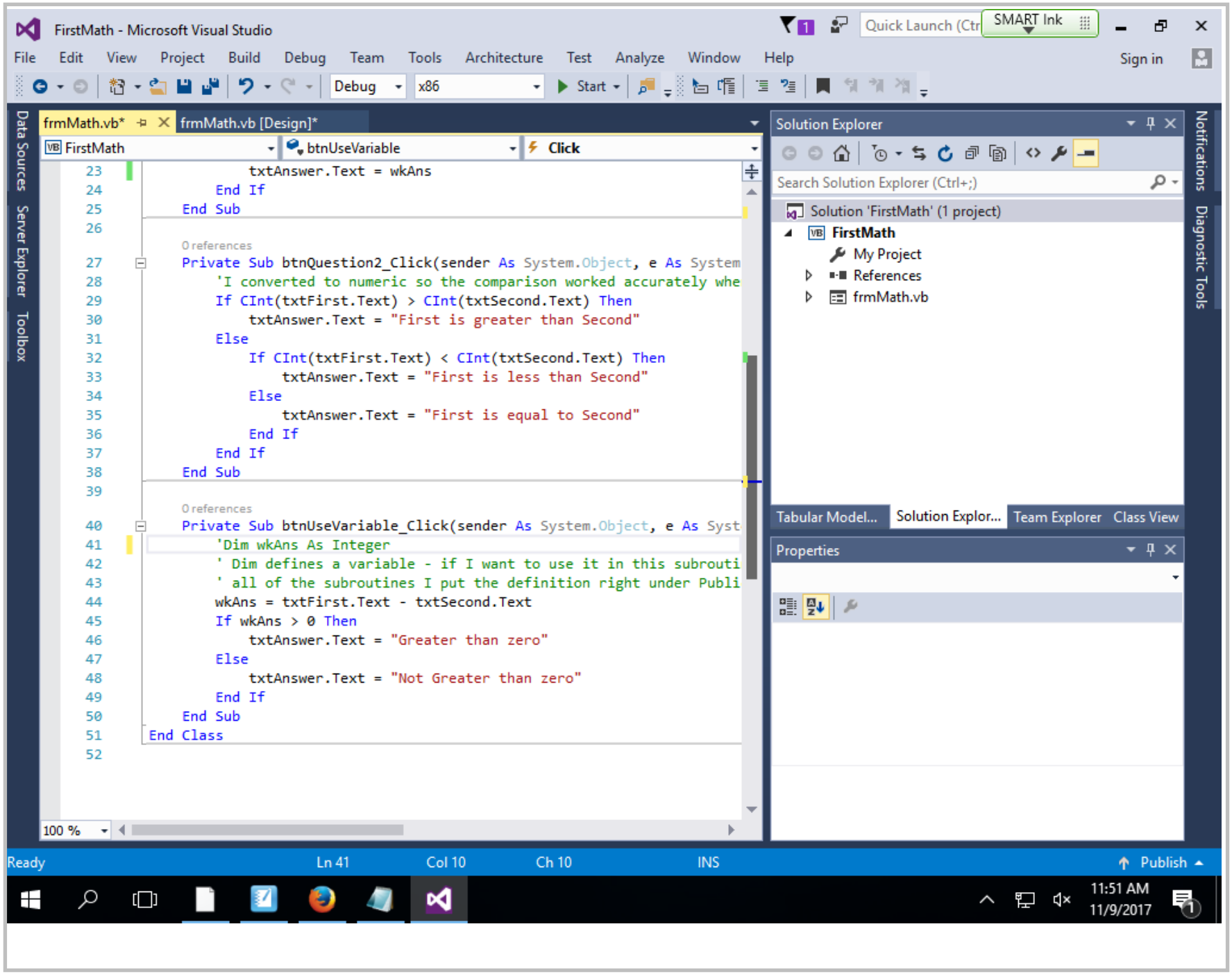

FirstMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmMath.vb
frmMath.vb [Design]
FirstMath
btnQuestion1
Click
Public Class frmMath
global
Private Sub btnAdd_Click(sender As System.Object, e As System.EventArgs
txtAnswer.Text = CInt(txtFirst.Text) + CInt(txtSecond.Text)
End Sub
Private Sub btnSubtract_Click(sender As System.Object, e As System.Ever
txtAnswer.Text = txtFirst.Text - txtSecond.Text
End Sub
Private Sub btnMultiply_Click(sender As System.Object, e As System.Ever
txtAnswer.Text = txtFirst.Text * txtSecond.Text
End Sub
Private Sub btnDivide_Click(sender As System.Object, e As System.EventA
txtAnswer.Text = txtFirst.Text / txtSecond.Text
End Sub
Private Sub btnQuestion1_Click(sender As System.Object, e As System.Eve
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = "Different"
End If
End Sub
Private Sub btnQuestion2_Click(sender As System.Object, e As System.Eve
Tabular Model Explorer
Search
Models
If I define at the top before the subs
it is a global variable and is available
to all of the subs.
Solution Explorer
Team Explorer
Ready
Ln 25
Col 12
Ch 12
INS
Publish
11:46 AM
11/9/2017

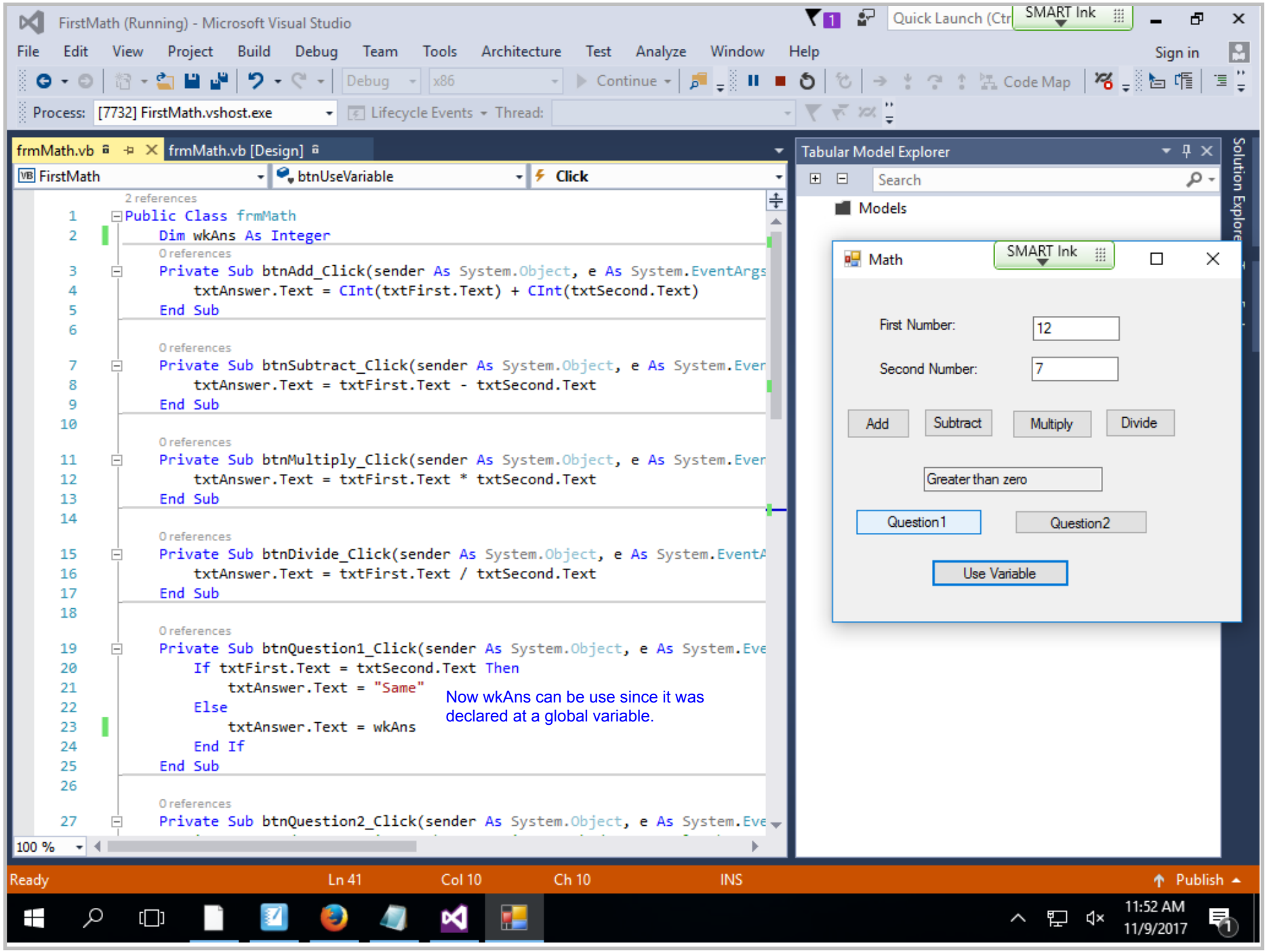

FirstMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Sign in
Debug
x86
Continue
Code Map
Process: [3924] FirstMath.vshost.exe
Lifecycle Events
Thread:
frmMath.vb
frmMath.vb [Design]
FirstMath
btnQuestion1
Click
34 Else
35 txtAnswer.Text = "First is equal to Second"
36 End If
37 End If
38 End Sub
39
0 references
40 Private Sub btnUseVariable_Click(sender As System.Object, e As System.E
41 Dim wkAns As Integer
42 ' Dim defines a variable - if I want to use it in this subroutine.
43 ' all of the subroutines I put the definition right under Public Cl
44 wkAns = txtFirst.Text - txtSecond.Text
45 If wkAns > 0 Then
46 txtAnswer.Text = "Greater than zero"
47 Else
48 txtAnswer.Text = "Not Greater than zero"
49 End If
50 End Sub
51 End Class
52
5
wkAns
100 %
Tabular Model Explorer
Search
Models
Math
SMART Ink
First Number:
17
Second Number:
12
Add
Subtract
Multiply
Divide
Greater than zero
Question1
Question2
Use Variable
Solution Explorer
Team Explorer
Ready
Ln 23
Col 31
Ch 31
INS
Publish
11:48 AM
11/9/2017

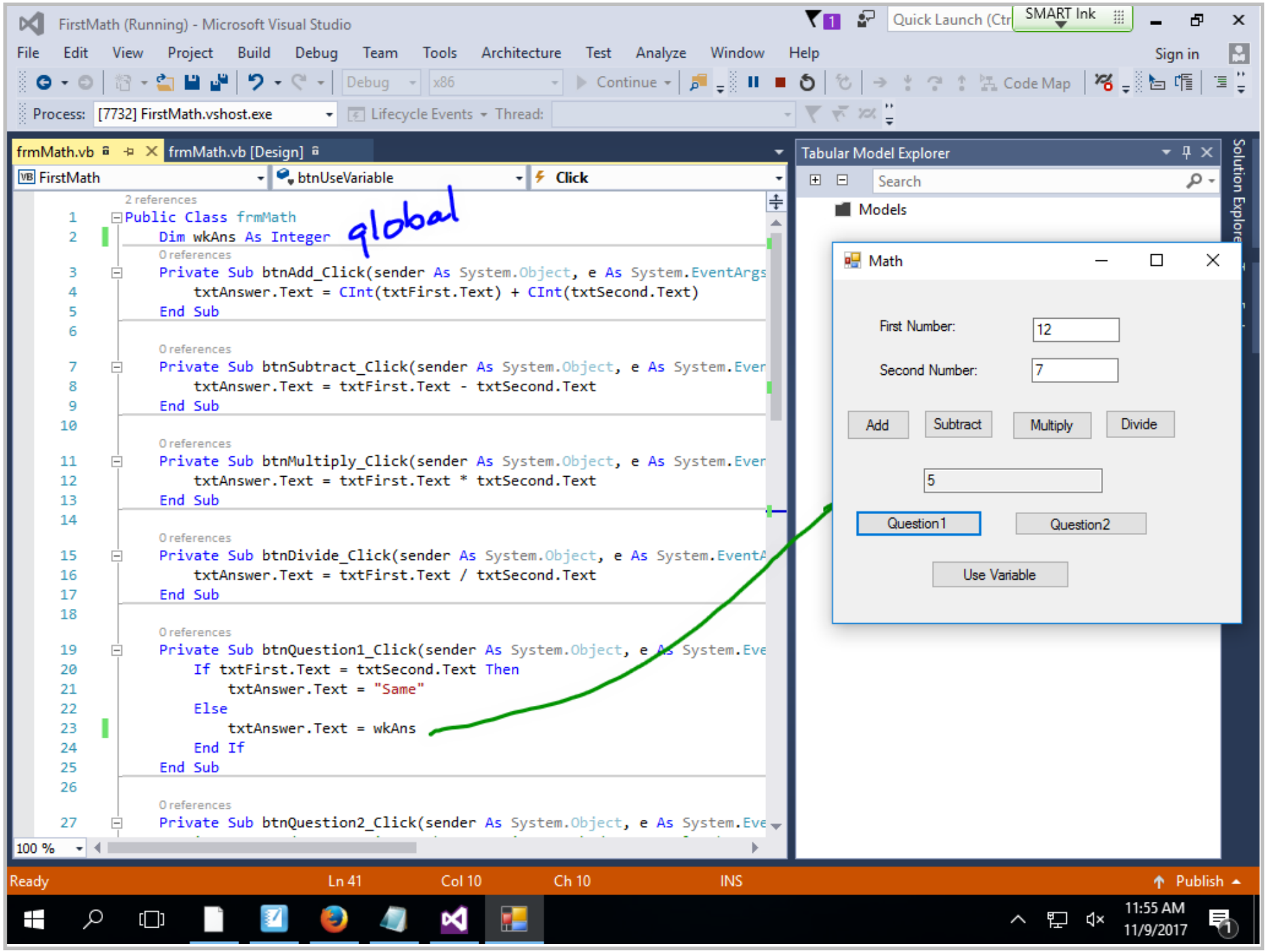

FirstMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
x86
Start
frmMath.vb*
frmMath.vb [Design]*
FirstMath
btnQuestion1
Click
17 End Sub
18
0 references
19 Private Sub btnQuestion1_Click(sender As System.Object, e As System
20 If txtFirst.Text = txtSecond.Text Then
21 txtAnswer.Text = "Same"
22 Else
23 txtAnswer.Text = wkAns
24 End If
25 End Sub
26
0 references
27 Private Sub btnQuestion2_Click(sender As System.Object, e As System
28 'I converted to numeric so the comparison worked accurately whe
29 If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
30 txtAnswer.Text = "First is greater than Second"
31 Else
32 If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
33 txtAnswer.Text = "First is less than Second"
34 Else
35 txtAnswer.Text = "First is equal to Second"
36 End If
37 End If
38 End Sub
39
0 references
40 Private Sub btnUseVariable_Click(sender As System.Object, e As Syst
41 Dim wkAns As Integer
42 ' Dim defines a variable - if I want to use it in this subrouti
43 ' all of the subroutines I put the definition right under Publi
44 wkAns = txtFirst.Text - txtSecond.Text
45 If wkAns > 0 Then
46 txtAnswer.Text = "Greater than zero"
47 Else
48 txtAnswer.Text = "Not Greater than zero"
wkAns is not recognized because it was declared locally in the sub below.
100 %
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'FirstMath' (1 project)
FirstMath
My Project
References
frmMath.vb
Tabular Model...
Solution Explor...
Team Explorer
Class View
Properties
Ready
Ln 23
Col 35
Ch 35
INS
Publish
11:49 AM
11/9/2017

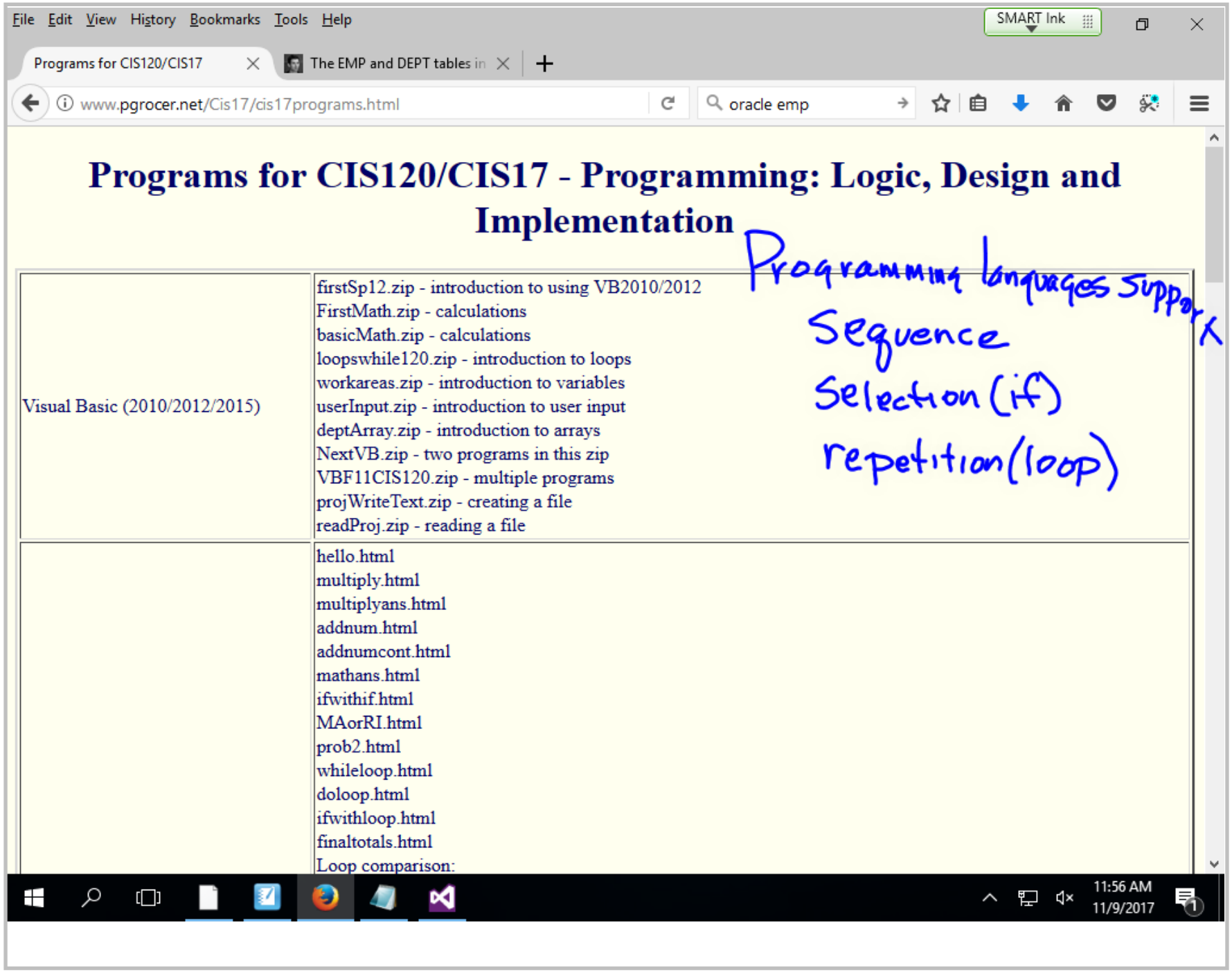

FirstMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug x86 Start
frmMath.vb frmMath.vb [Design]
FirstMath btnQuestion1 Click
End Sub
0 references
Private Sub btnQuestion1_Click(sender As System.Object, e As System
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = wkAns
End If
End Sub
0 references
Private Sub btnQuestion2_Click(sender As System.Object, e As System
'I converted to numeric so the comparison worked accurately whe
If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
txtAnswer.Text = "First is greater than Second"
Else
If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
txtAnswer.Text = "First is less than Second"
Else
txtAnswer.Text = "First is equal to Second"
End If
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'FirstMath' (1 project)
FirstMath
My Project
References
frmMath.vb
Properties
Error List
Entire Solution 1 Error 0 Warnings 0 Messages
Search Error List
Code Description Project File Line Suppression St...
BC30451 'wkAns' is not declared. It may be inaccessible due to its protection level. FirstMath frmMath.vb 23 Active
Error List Output
Build failed
Publish
11:51 AM
11/9/2017


FirstMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug x86 Start
frmMath.vb* frmMath.vb [Design]*
FirstMath frmMath InitializeComponent
Now I am declaring a global variable.
Public Class frmMath
Dim wkAns As Integer
Private Sub btnAdd_Click(sender As System.Object, e As System.Event
txtAnswer.Text = CInt(txtFirst.Text) + CInt(txtSecond.Text)
End Sub
Private Sub btnSubtract_Click(sender As System.Object, e As System.
txtAnswer.Text = txtFirst.Text - txtSecond.Text
End Sub
Private Sub btnMultiply_Click(sender As System.Object, e As System.
txtAnswer.Text = txtFirst.Text * txtSecond.Text
End Sub
Private Sub btnDivide_Click(sender As System.Object, e As System.Ev
txtAnswer.Text = txtFirst.Text / txtSecond.Text
End Sub
Private Sub btnQuestion1_Click(sender As System.Object, e As System
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = wkAns
End If
End Sub
Private Sub btnQuestion2_Click(sender As System.Object, e As System
'I converted to numeric so the comparison worked accurately whe
If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
Solution Explorer
Solution 'FirstMath' (1 project)
FirstMath
My Project
References
frmMath.vb
Properties
Ready Ln 2 Col 25 Ch 25 INS Publish
11:51 AM
11/9/2017

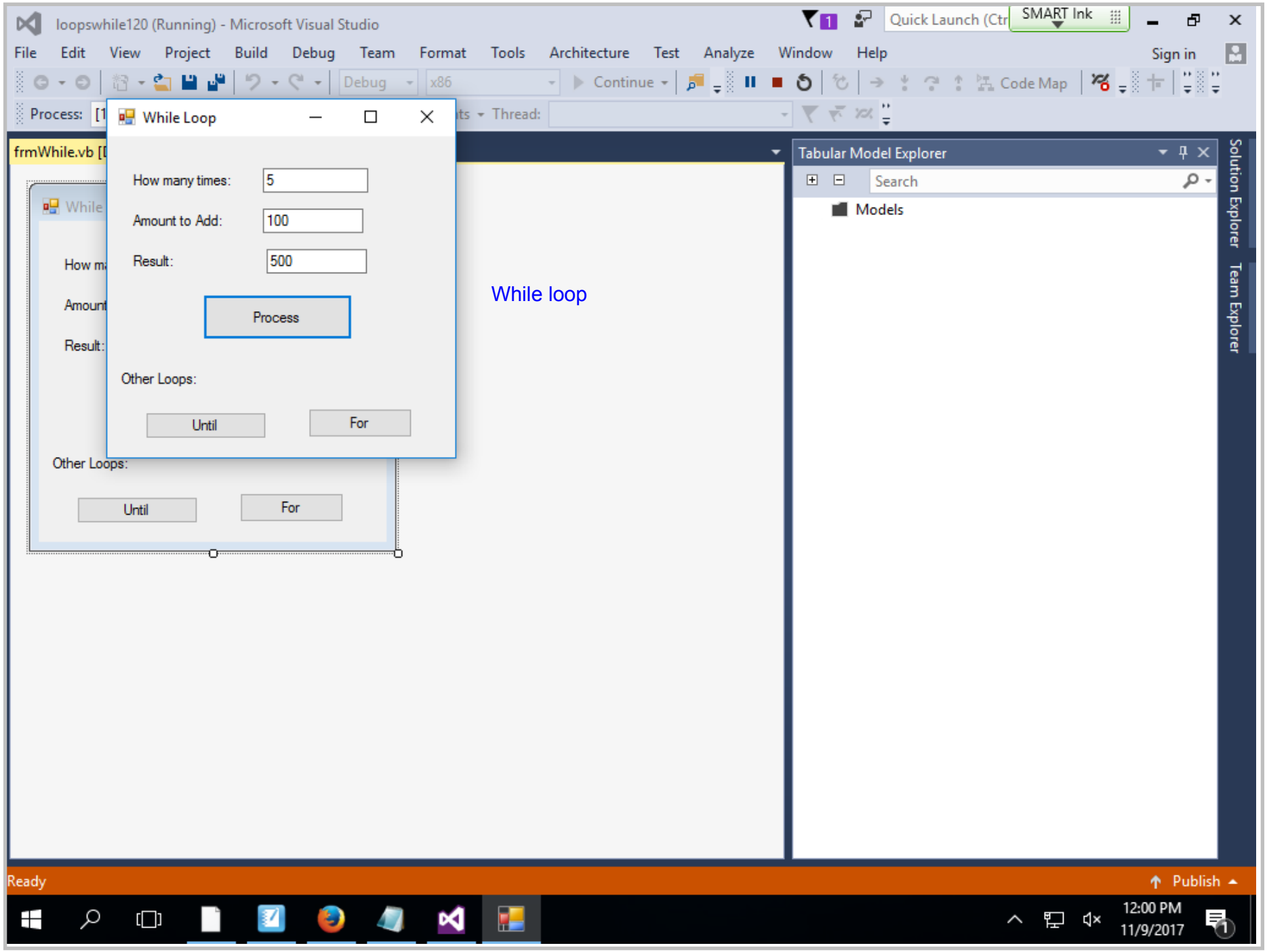

FirstMath - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Sign in
Debug
x86
Start
frmMath.vb*
frmMath.vb [Design]*
FirstMath
btnUseVariable
Click
23 txtAnswer.Text = wkAns
24 End If
25 End Sub
26
0 references
27 Private Sub btnQuestion2_Click(sender As System.Object, e As System
28 'I converted to numeric so the comparison worked accurately whe
29 If CInt(txtFirst.Text) > CInt(txtSecond.Text) Then
30 txtAnswer.Text = "First is greater than Second"
31 Else
32 If CInt(txtFirst.Text) < CInt(txtSecond.Text) Then
33 txtAnswer.Text = "First is less than Second"
34 Else
35 txtAnswer.Text = "First is equal to Second"
36 End If
37 End If
38 End Sub
39
0 references
40 Private Sub btnUseVariable_Click(sender As System.Object, e As Syst
41 'Dim wkAns As Integer
42 ' Dim defines a variable - if I want to use it in this subrouti
43 ' all of the subroutines I put the definition right under Publi
44 wkAns = txtFirst.Text - txtSecond.Text
45 If wkAns > 0 Then
46 txtAnswer.Text = "Greater than zero"
47 Else
48 txtAnswer.Text = "Not Greater than zero"
49 End If
50 End Sub
51 End Class
52
100 %
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'FirstMath' (1 project)
FirstMath
My Project
References
frmMath.vb
Tabular Model... Solution Explor... Team Explorer Class View
Properties
Data Sources Server Explorer Toolbox
Notifications Diagnostic Tools
Ready Ln 41 Col 10 Ch 10 INS
Publish
11:51 AM
11/9/2017

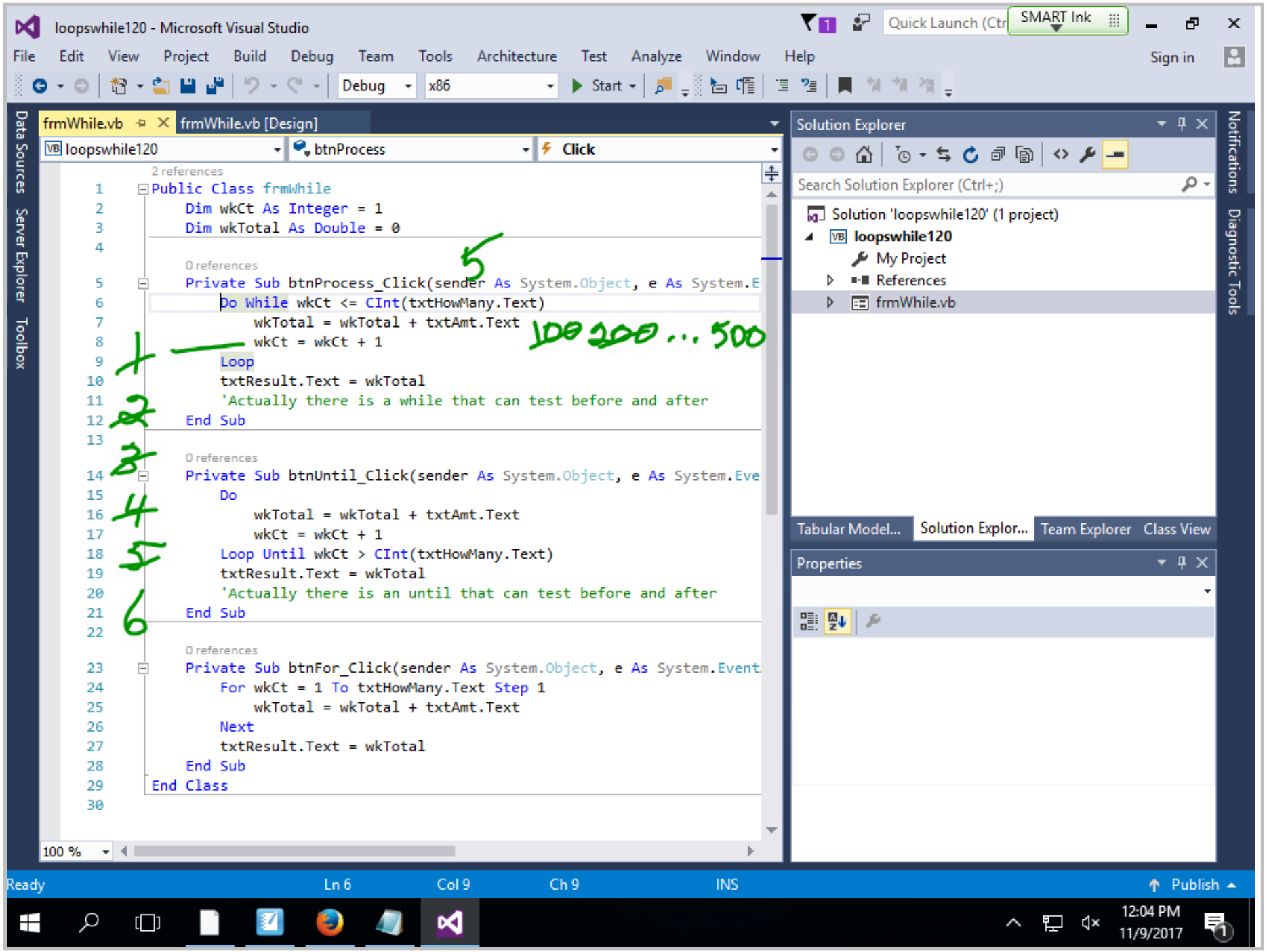

FirstMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmMath.vb
frmMath.vb [Design]
FirstMath
btnUseVariable
Click
Public Class frmMath
Dim wkAns As Integer
Private Sub btnAdd_Click(sender As System.Object, e As System.EventArgs
txtAnswer.Text = CInt(txtFirst.Text) + CInt(txtSecond.Text)
End Sub
Private Sub btnSubtract_Click(sender As System.Object, e As System.Ever
txtAnswer.Text = txtFirst.Text - txtSecond.Text
End Sub
Private Sub btnMultiply_Click(sender As System.Object, e As System.Ever
txtAnswer.Text = txtFirst.Text * txtSecond.Text
End Sub
Private Sub btnDivide_Click(sender As System.Object, e As System.EventA
txtAnswer.Text = txtFirst.Text / txtSecond.Text
End Sub
Private Sub btnQuestion1_Click(sender As System.Object, e As System.Eve
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = wkAns
End If
End Sub
Private Sub btnQuestion2_Click(sender As System.Object, e As System.Eve
Now wkAns can be use since it was declared at a global variable.
Tabular Model Explorer
Models
Math
First Number:
12
Second Number:
7
Add
Subtract
Multiply
Divide
Greater than zero
Question1
Question2
Use Variable
Ready
Ln 41
Col 10
Ch 10
INS
Publish
11:52 AM
11/9/2017

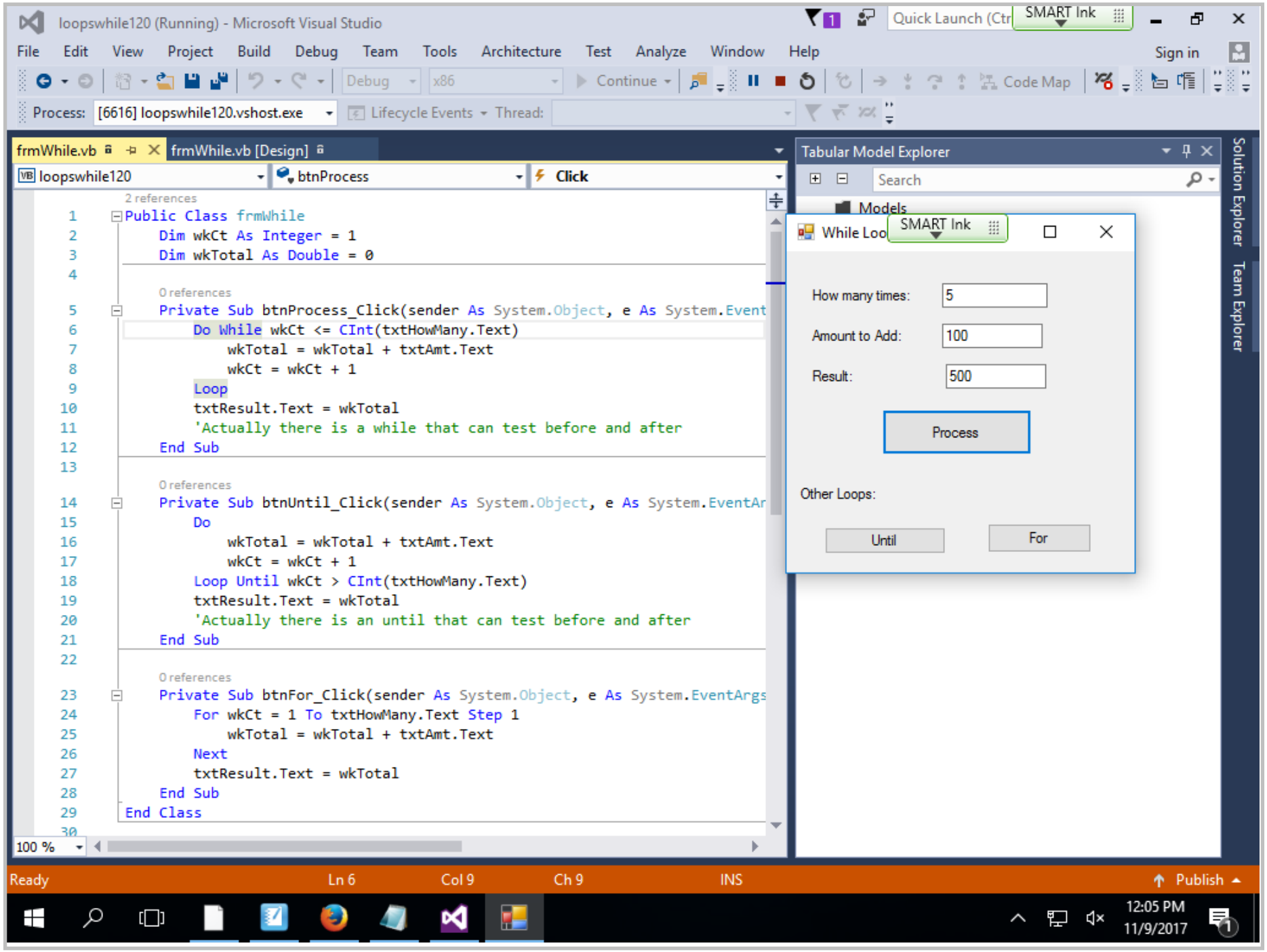

FirstMath (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmMath.vb
frmMath.vb [Design]
FirstMath
btnUseVariable
Click
2 references
Public Class frmMath
Dim wkAns As Integer
global
0 references
Private Sub btnAdd_Click(sender As System.Object, e As System.EventArgs
txtAnswer.Text = CInt(txtFirst.Text) + CInt(txtSecond.Text)
End Sub
0 references
Private Sub btnSubtract_Click(sender As System.Object, e As System.Ever
txtAnswer.Text = txtFirst.Text - txtSecond.Text
End Sub
0 references
Private Sub btnMultiply_Click(sender As System.Object, e As System.Ever
txtAnswer.Text = txtFirst.Text * txtSecond.Text
End Sub
0 references
Private Sub btnDivide_Click(sender As System.Object, e As System.EventA
txtAnswer.Text = txtFirst.Text / txtSecond.Text
End Sub
0 references
Private Sub btnQuestion1_Click(sender As System.Object, e As System.Eve
If txtFirst.Text = txtSecond.Text Then
txtAnswer.Text = "Same"
Else
txtAnswer.Text = wkAns
End If
End Sub
0 references
Private Sub btnQuestion2_Click(sender As System.Object, e As System.Eve
Tabular Model Explorer
Search
Models
Math
First Number:
12
Second Number:
7
Add
Subtract
Multiply
Divide
5
Question1
Question2
Use Variable
Solution Explorer
100 %
Ready
Ln 41
Col 10
Ch 10
INS
Publish
11:55 AM
11/9/2017

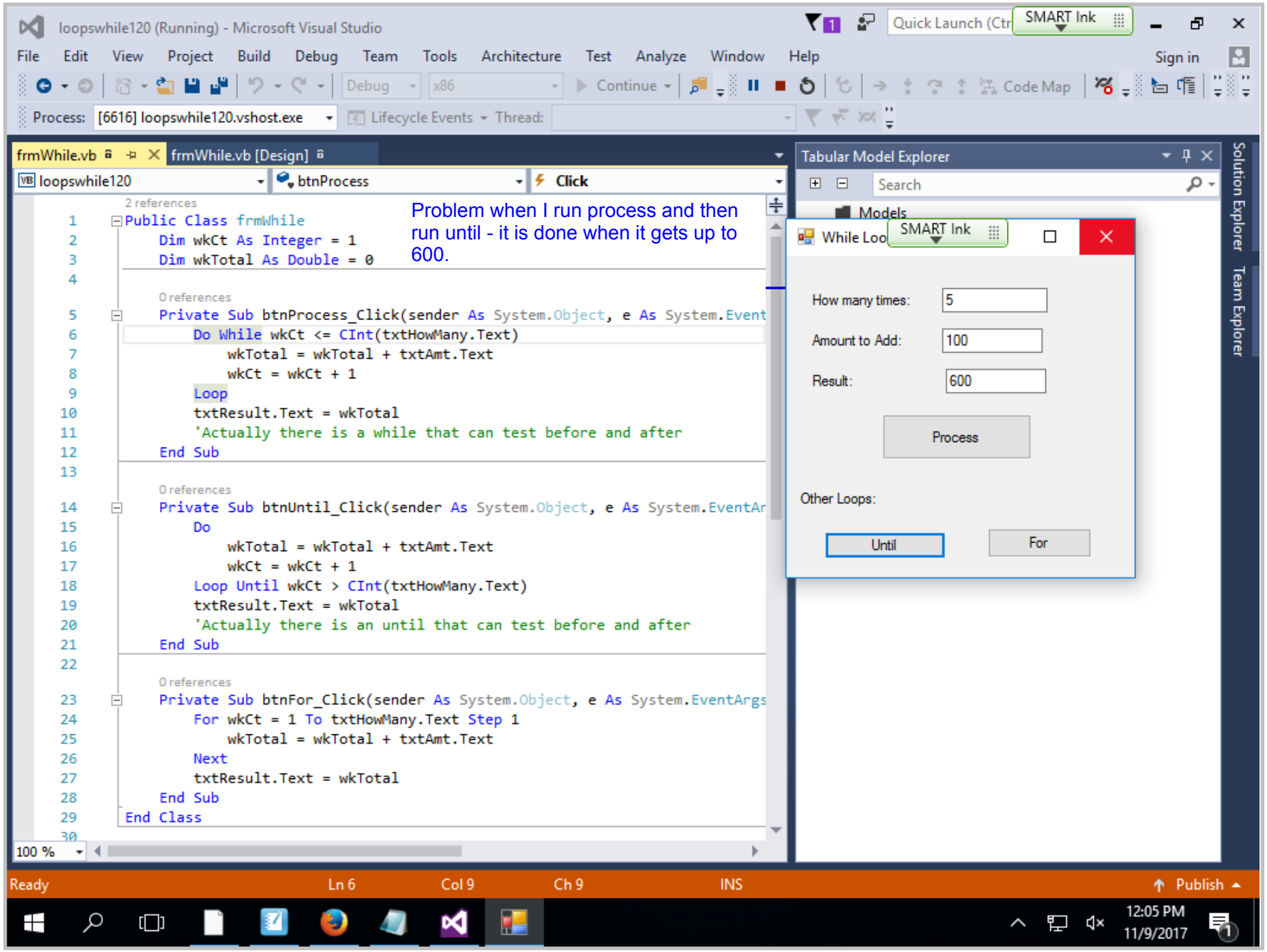


Title: Nov 9-11:56 AM (31 of 39)

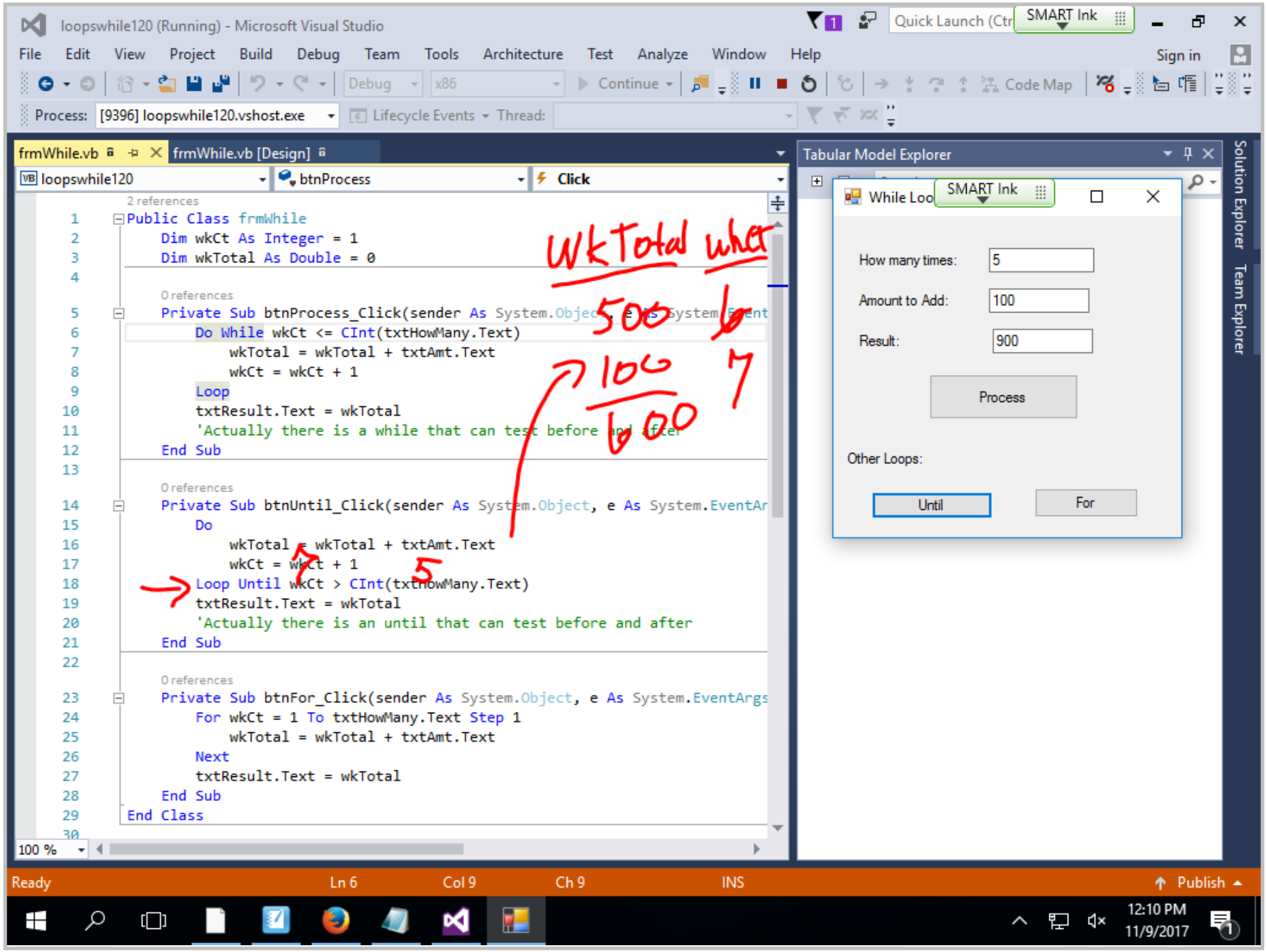

loopswhile120 (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Format Tools Architecture Test Analyze Window Help
While Loop
How many times: 5
Amount to Add: 100
Result: 500
Process
Other Loops:
Until
For
While loop
Tabular Model Explorer
Search
Models
Solution Explorer
Team Explorer
Ready
Publish
12:00 PM
11/9/2017

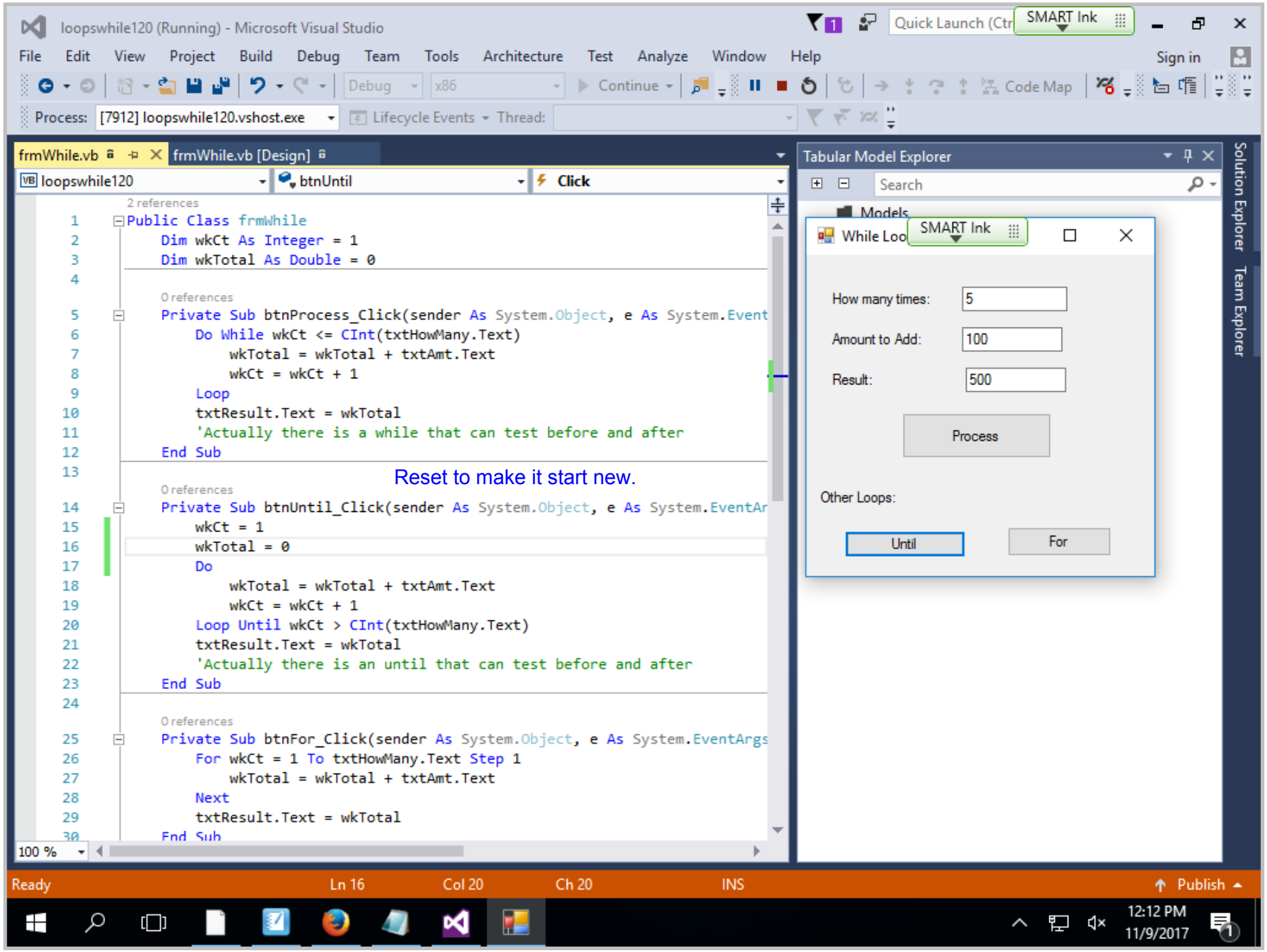

loopswhile120 - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug x86 Start
frmWhile.vb frmWhile.vb [Design]
loopswhile120 btnProcess Click
2 references
Public Class frmWhile
Dim wkCt As Integer = 1
Dim wkTotal As Double = 0
0 references
Private Sub btnProcess_Click(sender As System.Object, e As System.E
Do While wkCt <= CInt(txtHowMany.Text)
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop
txtResult.Text = wkTotal
'Actually there is a while that can test before and after
End Sub
0 references
Private Sub btnUntil_Click(sender As System.Object, e As System.Eve
Do
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop Until wkCt > CInt(txtHowMany.Text)
txtResult.Text = wkTotal
'Actually there is an until that can test before and after
End Sub
0 references
Private Sub btnFor_Click(sender As System.Object, e As System.Event
For wkCt = 1 To txtHowMany.Text Step 1
wkTotal = wkTotal + txtAmt.Text
Next
txtResult.Text = wkTotal
End Sub
End Class
100 200 ... 500
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'loopswhile120' (1 project)
loopswhile120
My Project
References
frmWhile.vb
Properties
Ready Ln 6 Col 9 Ch 9 INS Publish
12:04 PM
11/9/2017

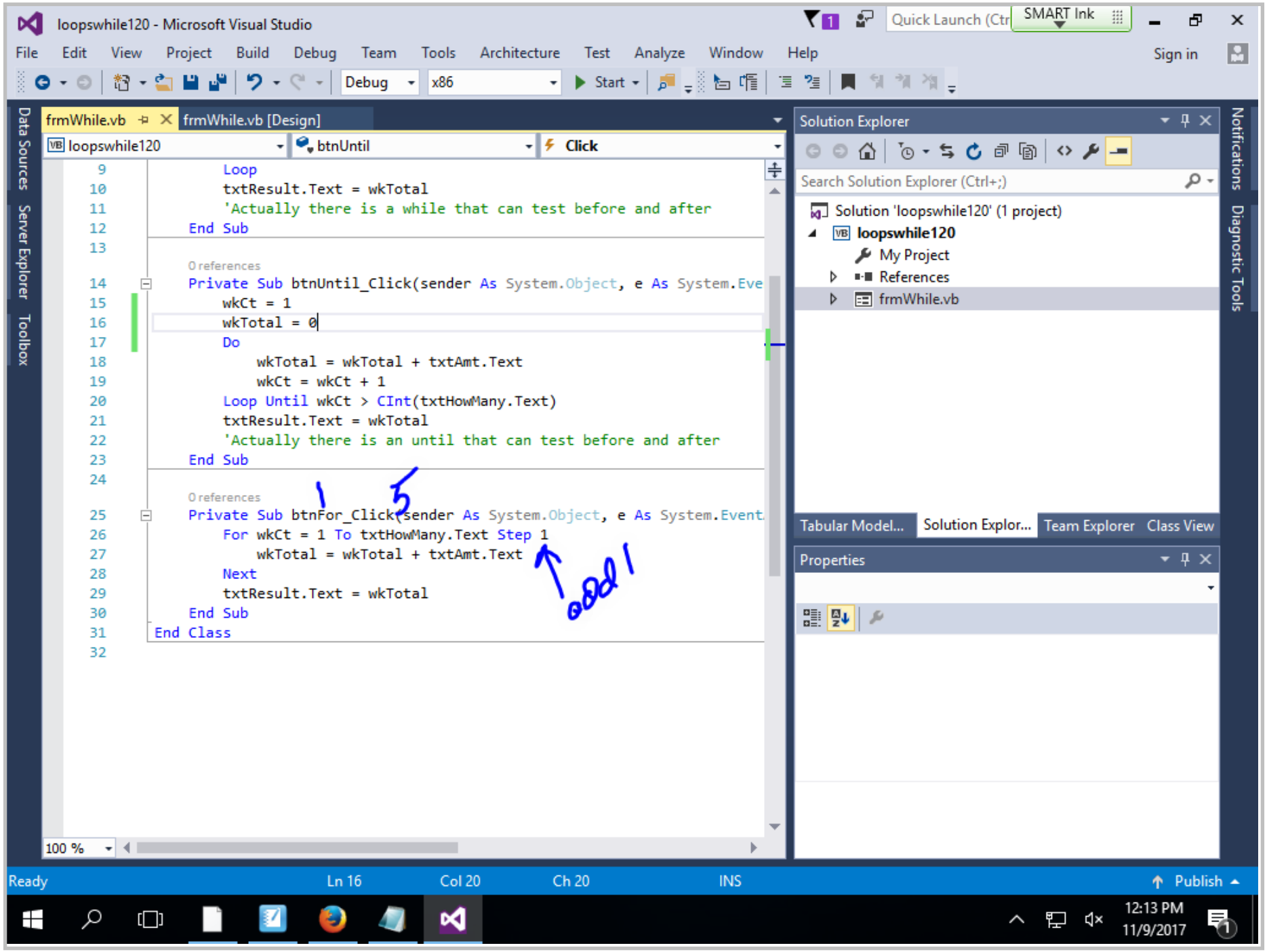

loopswhile120 (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmWhile.vb
frmWhile.vb [Design]
loopswhile120
btnProcess
Click
Public Class frmWhile
Dim wkCt As Integer = 1
Dim wkTotal As Double = 0
Private Sub btnProcess_Click(sender As System.Object, e As System.Event
Do While wkCt <= CInt(txtHowMany.Text)
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop
txtResult.Text = wkTotal
'Actually there is a while that can test before and after
End Sub
Private Sub btnUntil_Click(sender As System.Object, e As System.EventAr
Do
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop Until wkCt > CInt(txtHowMany.Text)
txtResult.Text = wkTotal
'Actually there is an until that can test before and after
End Sub
Private Sub btnFor_Click(sender As System.Object, e As System.EventArgs
For wkCt = 1 To txtHowMany.Text Step 1
wkTotal = wkTotal + txtAmt.Text
Next
txtResult.Text = wkTotal
End Sub
End Class
Tabular Model Explorer
Models
While Loo
How many times:
5
Amount to Add:
100
Result:
500
Process
Other Loops:
Until
For
Ready
Ln 6
Col 9
Ch 9
INS
Publish
12:05 PM
11/9/2017

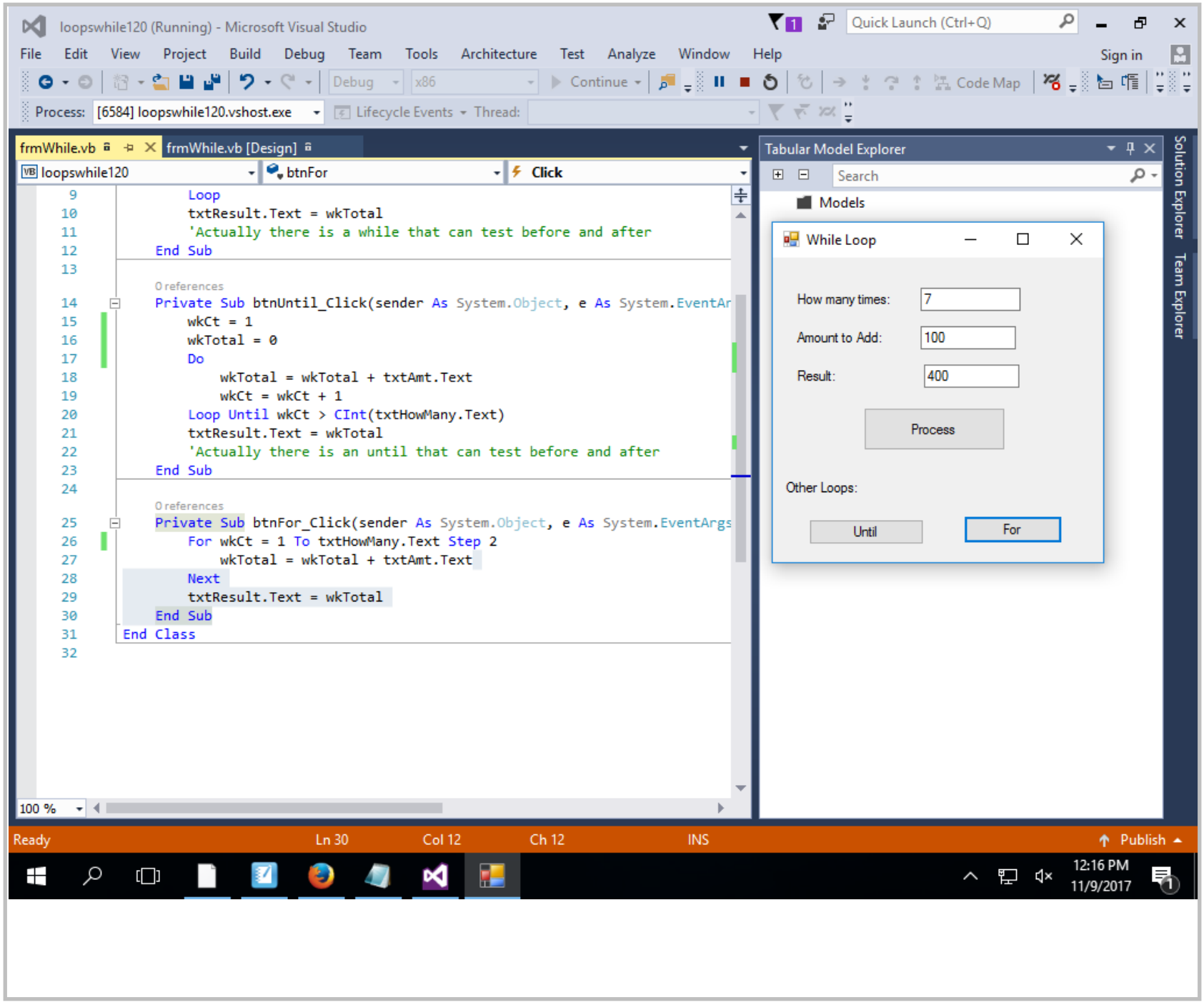



```
2 references
Public Class frmWhile
    Dim wkCt As Integer = 1
    Dim wkTotal As Double = 0

    0 references
    Private Sub btnProcess_Click(sender As System.Object, e As System.Event
        Do While wkCt <= CInt(txtHowMany.Text)
            wkTotal = wkTotal + txtAmt.Text
            wkCt = wkCt + 1
        Loop
        txtResult.Text = wkTotal
        'Actually there is a while that can test before and after
    End Sub

    0 references
    Private Sub btnUntil_Click(sender As System.Object, e As System.EventAr
        Do
            wkTotal = wkTotal + txtAmt.Text
            wkCt = wkCt + 1
        Loop Until wkCt > CInt(txtHowMany.Text)
        txtResult.Text = wkTotal
        'Actually there is an until that can test before and after
    End Sub

    0 references
    Private Sub btnFor_Click(sender As System.Object, e As System.EventArgs
        For wkCt = 1 To txtHowMany.Text Step 1
            wkTotal = wkTotal + txtAmt.Text
        Next
        txtResult.Text = wkTotal
    End Sub
End Class
```


loopswhile120 (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmWhile.vb
frmWhile.vb [Design]
loopswhile120
btnProcess
Click
2 references
Public Class frmWhile
Dim wkCt As Integer = 1
Dim wkTotal As Double = 0
0 references
Private Sub btnProcess_Click(sender As System.Object, e As System.Event
Do While wkCt <= CInt(txtHowMany.Text)
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop
txtResult.Text = wkTotal
'Actually there is a while that can test before and after
End Sub
0 references
Private Sub btnUntil_Click(sender As System.Object, e As System.EventAr
Do
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop Until wkCt > CInt(txtHowMany.Text)
txtResult.Text = wkTotal
'Actually there is an until that can test before and after
End Sub
0 references
Private Sub btnFor_Click(sender As System.Object, e As System.EventArgs
For wkCt = 1 To txtHowMany.Text Step 1
wkTotal = wkTotal + txtAmt.Text
Next
txtResult.Text = wkTotal
End Sub
End Class
wkTotal what
500
100
600
7
5
Tabular Model Explorer
While Loo
SMART Ink
How many times: 5
Amount to Add: 100
Result: 900
Process
Other Loops:
Until
For
Solution Explorer
Team Explorer
Ready
Ln 6
Col 9
Ch 9
INS
Publish
12:10 PM
11/9/2017


loopswhile120 (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
frmWhile.vb
frmWhile.vb [Design]
loopswhile120
btnUntil
Click
2 references
Public Class frmWhile
Dim wkCt As Integer = 1
Dim wkTotal As Double = 0
0 references
Private Sub btnProcess_Click(sender As System.Object, e As System.Event
Do While wkCt <= CInt(txtHowMany.Text)
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop
txtResult.Text = wkTotal
'Actually there is a while that can test before and after
End Sub
Reset to make it start new.
0 references
Private Sub btnUntil_Click(sender As System.Object, e As System.EventAr
wkCt = 1
wkTotal = 0
Do
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop Until wkCt > CInt(txtHowMany.Text)
txtResult.Text = wkTotal
'Actually there is an until that can test before and after
End Sub
0 references
Private Sub btnFor_Click(sender As System.Object, e As System.EventArgs
For wkCt = 1 To txtHowMany.Text Step 1
wkTotal = wkTotal + txtAmt.Text
Next
txtResult.Text = wkTotal
End Sub
Tabular Model Explorer
Search
Models
While Loo
How many times: 5
Amount to Add: 100
Result: 500
Process
Other Loops:
Until
For
Solution Explorer
Team Explorer
Ready
Ln 16
Col 20
Ch 20
INS
Publish
12:12 PM
11/9/2017


loopswhile120 - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug x86 Start
frmWhile.vb frmWhile.vb [Design]
loopswhile120 btnUntil Click
Loop
txtResult.Text = wkTotal
'Actually there is a while that can test before and after
End Sub
0 references
Private Sub btnUntil_Click(sender As System.Object, e As System.Eve
wkCt = 1
wkTotal = 0
Do
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop Until wkCt > CInt(txtHowMany.Text)
txtResult.Text = wkTotal
'Actually there is an until that can test before and after
End Sub
0 references
Private Sub btnFor_Click(sender As System.Object, e As System.Event
For wkCt = 1 To txtHowMany.Text Step 1
wkTotal = wkTotal + txtAmt.Text
Next
txtResult.Text = wkTotal
End Sub
End Class
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'loopswhile120' (1 project)
loopswhile120
My Project
References
frmWhile.vb
Properties
Ready Ln 16 Col 20 Ch 20 INS
Publish
12:13 PM
11/9/2017


loopswhile120 (Running) - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Sign in
Debug
x86
Continue
Code Map
Process: [6584] loopswhile120.vshost.exe
Lifecycle Events
Thread:
frmWhile.vb
frmWhile.vb [Design]
loopswhile120
btnFor
Click
Loop
txtResult.Text = wkTotal
'Actually there is a while that can test before and after
End Sub
0 references
Private Sub btnUntil_Click(sender As System.Object, e As System.EventAr
wkCt = 1
wkTotal = 0
Do
wkTotal = wkTotal + txtAmt.Text
wkCt = wkCt + 1
Loop Until wkCt > CInt(txtHowMany.Text)
txtResult.Text = wkTotal
'Actually there is an until that can test before and after
End Sub
0 references
Private Sub btnFor_Click(sender As System.Object, e As System.EventArgs
For wkCt = 1 To txtHowMany.Text Step 2
wkTotal = wkTotal + txtAmt.Text
Next
txtResult.Text = wkTotal
End Sub
End Class
100 %
Tabular Model Explorer
Search
Models
While Loop
How many times:
7
Amount to Add:
100
Result:
400
Process
Other Loops:
Until
For
Solution Explorer
Team Explorer
Ready
Ln 30
Col 12
Ch 12
INS
Publish
12:16 PM
11/9/2017