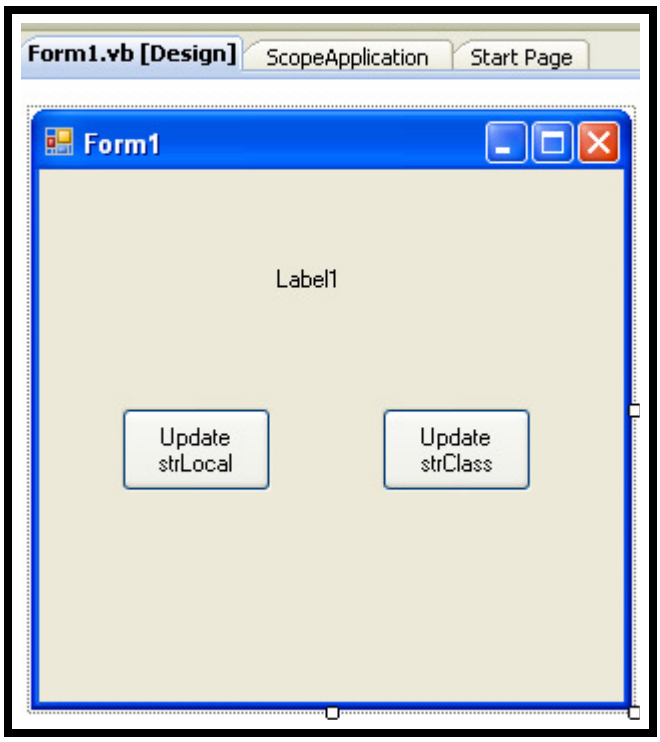
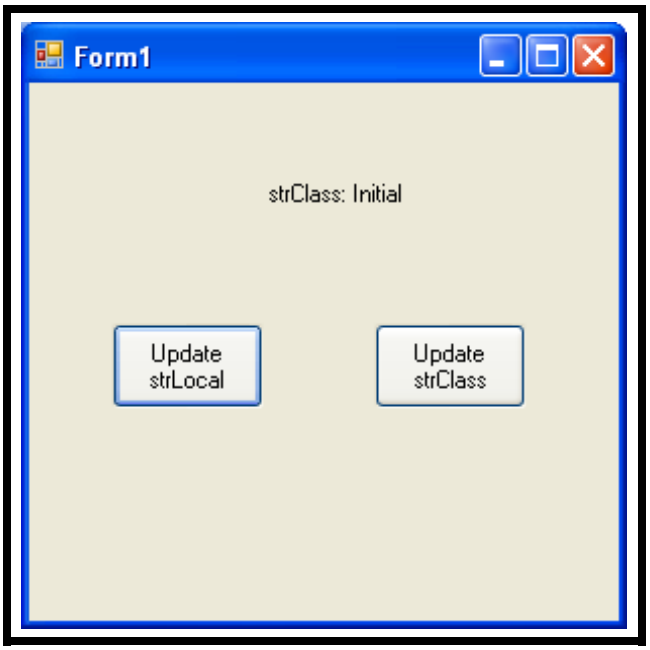
Name:_____

1. ScopeApplication form layout in Visual Studio is shown on the left and the application when it initally starts running is shown on the right. The code for the application is given below.






```
Public Class Form1
    Dim strClass As String = "strClass: Initial   "

    Private Sub Form1_Load(ByVal sender As System.Object, _
                           ByVal e As System.EventArgs) Handles MyBase.Load
        Label1.Text = strClass
    End Sub

    Private Sub Button1_Click(ByVal sender As System.Object, _
                              ByVal e As System.EventArgs) Handles Button1.Click
        Dim strLocal As String = "strLocal: Initial"
        strLocal = "strLocal: Updated"
        Label1.Text = strClass + strLocal
    End Sub

    Private Sub Button2_Click(ByVal sender As System.Object, _
                              ByVal e As System.EventArgs) Handles Button2.Click
        strClass = "strClass: Updated   "

        REM   Label1.Text = strClass + strLocal            <-<-<-<- Causes Error
        Label1.Text = strClass
        REM   Dim strLocal As String = "strLocal: Updated"
        REM        Label1.Text = strClass + strLocal
    End Sub
End Class
```

a) What causes Label1 to change from its initial Text of "Label1" when the application starts running?

b) What do you predict will happen if each buttons is clicked?

c) If we uncomment only the first REM in Button2_Click, then.what compiler error do you expect?

d) If we uncomment only the second and third REM's, then how would the program behave?

2. Recall that an *algorithm* is a sequence of well-defined steps that must be taken in order to perform a task. In English, write an algorithm to exit the building if the fire alarm goes