أهداف المعمل :

- التعامل مع الطبقات واشتقاق الكائنات .

تمرين المعمل :

صممي برنامج يحتوي على واجهة تحوي زر SHOW عند ضغطه يعرض رسالة ببيانات الطالب (الاسم-العنوان-العمر) باستخدام فصيلة CLASS .
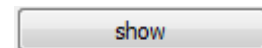
الأكواد

Class student

```
Public Class student
    Public name As String
    Public age As Integer
    Public address As String

    Public Sub set_value(ByVal x As String, ByVal y As Integer, ByVal z
As String)
        name = x
        age = y
        address = z

        MsgBox("my name is " & name & " " & "my age is " & age & "
adress" & address)
    End Sub

End Class
```

show

تعبئة البيانات باستخدام إجراء

```
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
                        System.EventArgs) Handles Button1.Click

        Dim st As New student
        st.set_value("zahra", 20, "qatif")
        st.print()
    End Sub
```

تعبئة البيانات بدون إجراء

```
Dim w As New student
        w.name = "zahra"
        w.age = 20
        w.address = "qatif"

        MsgBox("my name is " & w.name & " " & "my age is " & w.age & "
adress" & w.address)
```
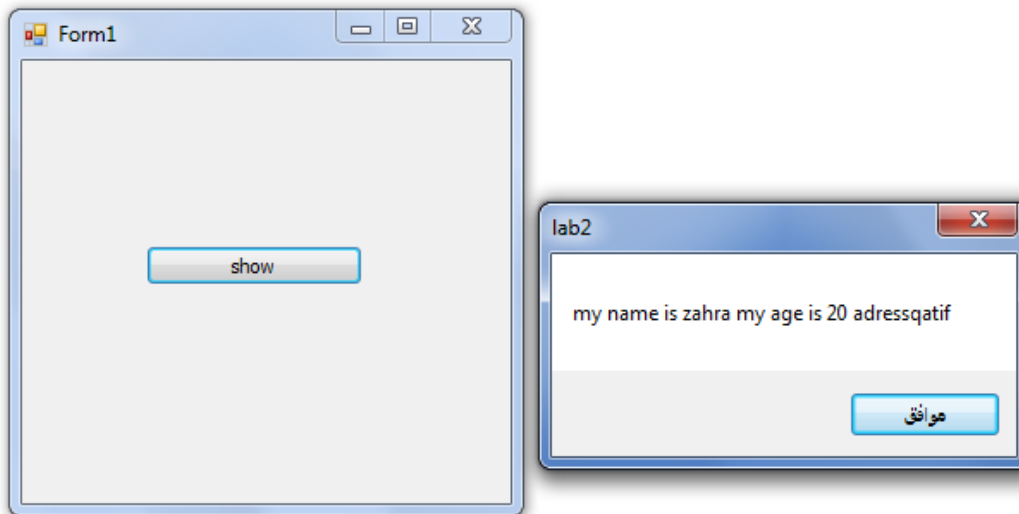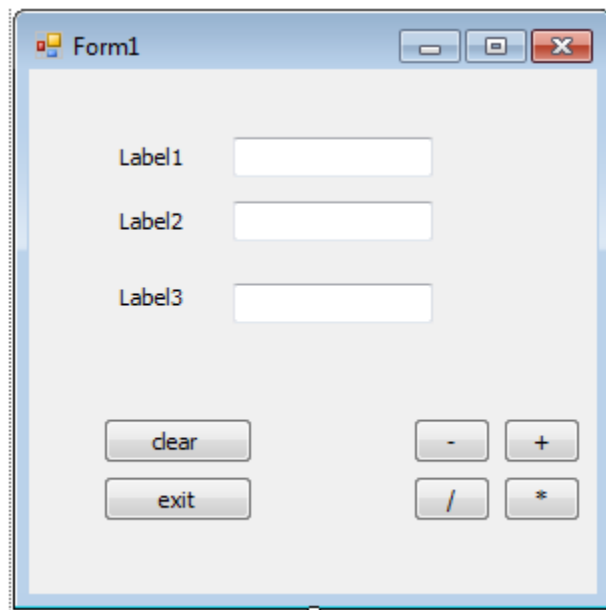
شاشة التنفيذ

عند النقر على زر [show] يقوم بعرض رسالة ببيانات الطالب.

التمرين الثاني :

صممي برنامج يسمح للمستخدم بادخال رقمين صحيحين ثم يقوم باجراء العمليات الحسابية على هذا الرقمين عن طريق فصيلة تحتوي على دوال العمليات الحسابية.

الأكود

فصيلة Mathop

```vb
Public Class mathop
    Public x, y, z As Double
    Public Function sum(ByVal a As Double, ByVal b As Double)
        Return a + b
    End Function

    Public Function subt(ByVal a As Double, ByVal b As Double)
        Return a - b
    End Function

    Public Function mul(ByVal a As Double, ByVal b As Double)
        Return a * b
    End Function

    Public Function div(ByVal a As Double, ByVal b As Double)
        Return a / b
    End Function


                                              End Class
```
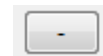
كود زر `+`

```vb
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click

        Dim math1 As New mathop
        x = TextBox1.Text
        y = TextBox2.Text
        z = math1.sum(x, y)
        TextBox3.Text = z
    End Sub
```

كود زر `-`

```vb
    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button2.Click
        Dim math1 As New mathop
        x = TextBox1.Text
        y = TextBox2.Text
```

```
        z = math1.subt(x, y)

        TextBox3.Text = z
    End Sub
```

كود زر ![*]

```
    Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button3.Click
        Dim math1 As New mathop
        x = TextBox1.Text
        y = TextBox2.Text
        z = math1.mul(x, y)
        TextBox3.Text = z
    End Sub
```
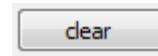
كود زر ![/]

```
    Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button4.Click
        Dim math1 As New mathop
        x = TextBox1.Text
        y = TextBox2.Text
        z = math1.div(x, y)
        TextBox3.Text = z
    End Sub
End Class
```
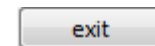
كود زر ![clear]

```
Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button5.Click
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
    End Sub
```

كود زر ![exit]

```
  Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button6.Click
        End
    End Sub
```