

2.2 The following program first reads four input marks and then displays the computed total and average mark.

Step 1: Create a form with two command buttons, five labels, four text boxes and one picture box according to the properties table below

Properties Table

Object	Property	Setting
Form	Name	frmAverage
	Caption	Average of Marks
Command Button	Name	cmdCompute
	Caption	&Compute Average
Command Button	Name	cmdExit
	Caption	&Exit
Label	Name	LblMark1
	Caption	First Mark
Label	Name	LblMark2
	Caption	Second Mark
Label	Name	LblMark3
	Caption	Third Mark
Label	Name	LblMark4
	Caption	Fourth Mark
Label	Name	lblMessage
	Caption	Please enter four marks (0 – 100)
Text Box	Name	TxtMark1
	Caption	(empty)
Text Box	Name	TxtMark2
	Caption	(empty)
Text Box	Name	TxtMark3
	Caption	(empty)
Text Box	Name	TxtMark4
	Caption	(empty)
Picture Box	Name	picOutput
	Caption	(empty)

Layout

Step 2 : *Add codes for the events*
cmdCompute_Click()
cmdExit

Codes for **cmdCompute**

```
Private Sub cmdCompute_Click()
    Dim Mark1 As Integer, Mark2 As Integer
    Dim Mark3 As Integer, Mark4 As Integer
    Dim Total As Integer
    Dim Average As Single

    Mark1 = Val(txtMark1.Text)
    Mark2 = Val(txtMark2.Text)
    Mark3 = Val(txtMark3.Text)
    Mark4 = Val(txtMark4.Text)
    Total = Mark1 + Mark2 + Mark3 + Mark4
    Average = Total / 4

    picOutput.Cls
    picOutput.Print "The input four marks are : "
    picOutput.Print Tab(5); Mark1; Tab(13); Mark2; Tab(21); _
        Mark3; Tab(29); Mark4

    picOutput.Print
    picOutput.Print "The total of the four marks "; Tab(35); _
        Format(Total, "#####0")
    picOutput.Print "The average of the four marks "; Tab(35); _
        Format(Average, "####.0")
End Sub
```

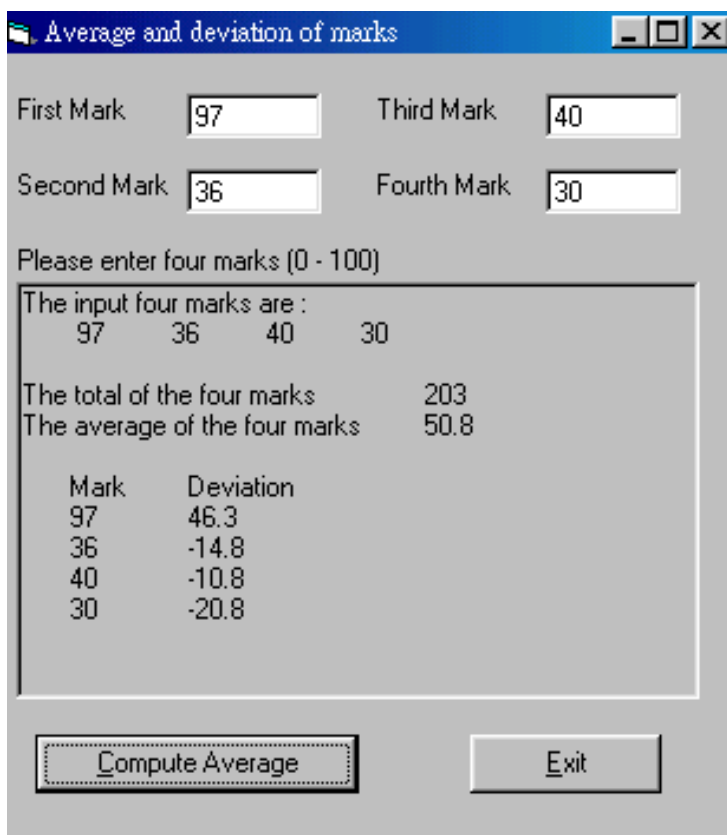
Codes for **cmdExit**

```
Private Sub cmdExit_Click()
    End
End Sub
```

Step 3 : Execution

Click the **txtMark1** text box and type 90
Click the **txtMark2** text box and type 80
Click the **txtMark3** text box and type 30
Click the **txtMark1** text box and type 25
Click the **Compute Average** command button
Try other values for marks
Terminate the program by clicking the **Exit** button

Task : Try to modify the program so that the deviation of each mark from the average will be shown as follows.



Average and deviation of marks

First Mark Third Mark

Second Mark Fourth Mark

Please enter four marks (0 - 100)

The input four marks are :
97 36 40 30

The total of the four marks 203
The average of the four marks 50.8

Mark	Deviation
97	46.3
36	-14.8
40	-10.8
30	-20.8