

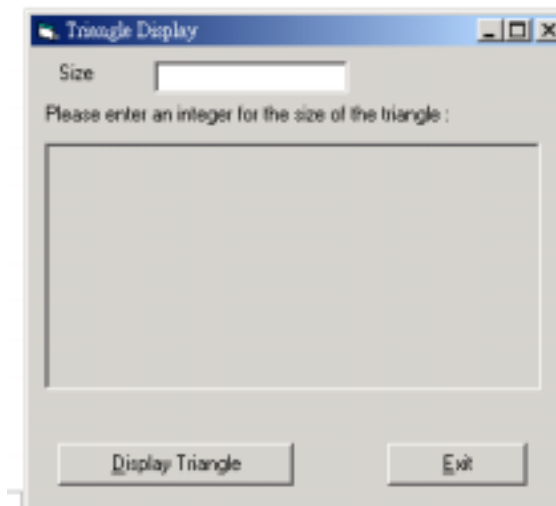
**5.3** Try to walkthrough the following program. The program reads a number *Size* and prints a triangle of asterisks with base and height *Size*.

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

**Properties Table**

Object	Property	Setting
Form	Name	frmTriangle
	Caption	Triangle Display
Command Button	Name	cmdDisplay
	Caption	&Display Triangle
Command Button	Name	cmdExit
	Caption	&Exit
Label	Name	LblSize
	Caption	Size
Label	Name	lblMessage
	Caption	Please enter an integer for the size of the triangle :
Text Box	Name	TxtSize
	Caption	(empty)
Picture Box	Name	picOutput
	Caption	(empty)

**Layout**



**Step 2 :** *Add codes for the events*  
*cmdDisplay\_Click()*  
*cmdExit*

Codes for **cmdDisplay**

```
Private Sub cmdDisplay_Click()  
    Dim Size As Integer, Length As Integer, i As Integer  
    Dim Printchar As String  
    Printchar = "*"   
  
    Size = Val(txtSize.Text)  
    picOutput.Cls   
  
    For Length = 1 To Size  
        For i = 1 To Size - Length + 1  
            picOutput.Print " ";  
        Next i  
        For i = 1 To Length  
            picOutput.Print Printchar;  
        Next i  
        picOutput.Print  
    Next Length   
  
End Sub
```

Codes for **cmdExit**

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

**Step 3 :** *Execution*

Click the **txtSize** text box and type 6.  
Click the **Display Triangle** command button.  
Try other values for **Size**.  
Terminate the program by clicking the **Exit** button.

**Task : (a) Modify the segment of the program**

```
For i = 1 To Size - Length + 1
    picOutput.Print " ";
Next i
For i = 1 To Length
    picOutput.Print Printchar;
Next i
```

**to**

```
For i = 1 To Size - Length + 1
    picOutput.Print " ";
Next i
For i = 1 To Length
    picOutput.Print " "; Printchar;
Next i
```

**Try to write down the results and execute the program for comparison.****Task : (b) Modify the segment of the program**

```
For i = 1 To Size - Length + 1
    picOutput.Print " ";
Next i
For i = 1 To Length
    picOutput.Print Printchar;
Next i
```

**to**

```
For i = 1 To Length
    picOutput.Print Printchar;
Next i
For i = 1 To Size - Length + 1
    picOutput.Print " ";
Next i
```

**Try to write down the results and execute the program for comparison.**