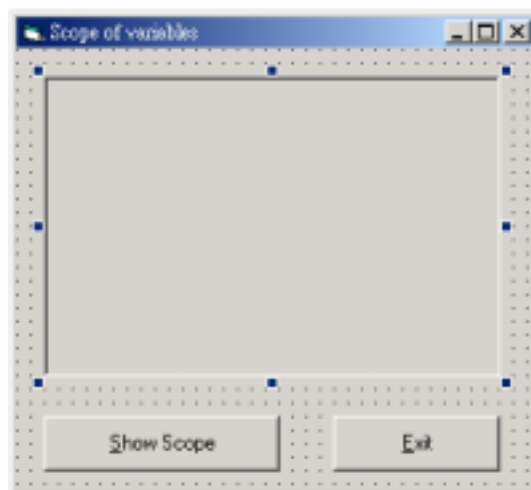# Worksheet 6

6.1 Try to walkthrough the following program and write down the expected results. Key-in the program and compare the results after execution. This program helps you to understand the scope of variables.

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

Properties Table

Object	Property	Setting
Form	Name	frmScope
	Caption	Scope of variables
Command Button	Name	cmdShow
	Caption	&Show Scope
Command Button	Name	cmdExit
	Caption	&Exit
Picture Box	Name	picOutput
	Caption	(empty)

Layout

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

Codes for **cmdShow**

```
Private Sub cmdShow_Click()
    Dim x As Integer

    picOutput.Cls
    picOutput.Print "Start program."
    picOutput.Print
    x = 1
    picOutput.Print "Global x = "; x
    Call FunB
    picOutput.Print "Global x = "; x
    picOutput.Print
    picOutput.Print "End program."

End Sub
```

Codes for **cmdExit**

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

Step 3 : Add codes for the functions *FunA* and *FunB*

```
Private Function FunA()
Dim x As Integer

    picOutput.Print "**** Start Function A."
    x = 3
    picOutput.Print "**** In Function A,   x = "; x
    picOutput.Print "**** End Function A."
End Function

Private Function FunB()
Dim x As Integer

    picOutput.Print "Start Function B."
    x = 2
    picOutput.Print "** In Function B,   x = "; x
    Call FunA
    picOutput.Print "** In Function B,   x = "; x
    picOutput.Print "** End Function B."

End Function
```

Step 4 : *Execution*

Click the **Show Scopes** command button.
Terminate the program by clicking the **Exit** button.