

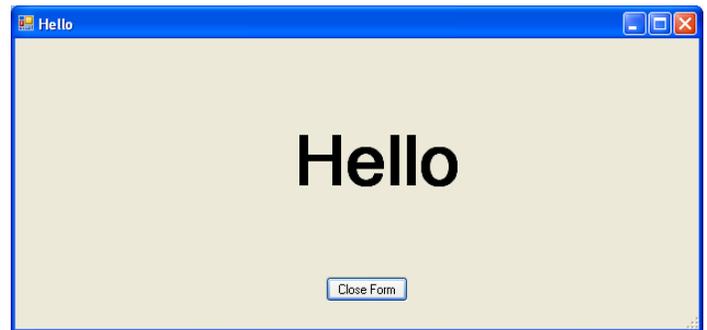
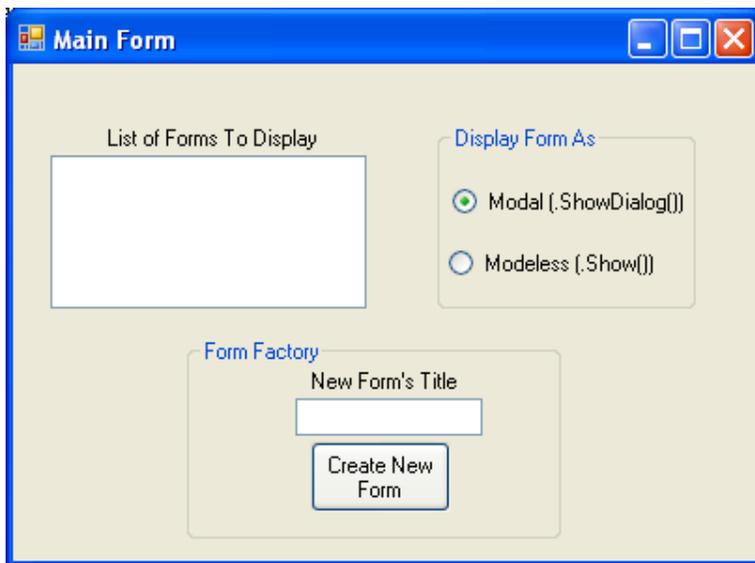
1. An *array* stores multiple values of same type, i.e., like a group of variables with a single name. All variables within an array are called *elements*, and individual elements can be accessed using the array name with a subscript.

```
// Array declaration
Const UPPER_SUBSCRIPT As Integer = 100
Dim dblScores(UPPER_SUBSCRIPT) As Double
Dim intScoreCount As Integer
...

// Array usage
dblScores(0) = 50.0      // assign element values
dblScores(1) = 60.0
dblScores(2) = 70.0
dblSum = dblScores(0) + dblScores(1) + dblScores(2) // look up values
```

In Lecture 17, we looked at the following NewForms application which allowed the user to create new frmDisplay Form objects dynamically at run-time. Actually the class is used to create frmDisplay objects.

A frmDisplay object:



Recall that we added the title for the new form into the ListBox lstForms.Items collection, but we had to maintain a separate global collection for storing the frmDisplay forms

Public Class frmMain

REM A collection to hold the forms create by clicking the btnCreateNewForm Button
 REM This collection "parallels" the order of the String Items in the ListBox (lstForms.Items),
 REM ***EXCEPT*** the lstForms.Items index starts at 0 and myForm index starts at 1.

Private myForms As New Collection

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

If txtNewFormTitle.Text <> "" Then

Dim myForm As New frmDisplay

myForm.Text = txtNewFormTitle.Text

myForm.lblMessage.Text = txtNewFormTitle.Text

lstForms.Items.Add(txtNewFormTitle.Text)

myForms.Add(myForm)

txtNewFormTitle.Text = ""

End If

End Sub

a) Modify the above code to use a parallel array of forms instead of the collection

2. Consider a simple application to process a set of scores: enter them, average, sum, maximum, and minimum.

	0	1	2	3	4	5	6	7	8	9	...	99
dblScores:	50	60	70	90	65	50	80	65			...	
intScoreCount:	8											

Process Scores

Enter New Score

Scores

Process Scores

Average Score

Sum of Scores

Maximum Score

Minimum Score

Process Scores