Control Arrays

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Control Arrays

- Arrays of text boxes, labels, command buttons (i.e., arrays of controls) are called **control arrays**.

- At least one element of a control array must be created when the form is designed.

- The remaining elements are created (a) during form design, or (b) with the Load statement when the program is run

Creating Control Arrays During Form Design

1. Create a control
2. Change its Index property to 0
3. Set all (other) properties that you want copies of the control to inherit
4. Create copies of the control by copying and pasting it: Use Ctrl+C (or Edit→Copy) and Ctrl+V (or Edit→Paste)

Example

```
Private Sub cmdCompute_Click()
    Dim depNum As Integer, sales As Single
    sales = 0
    For depNum = 0 To 4
        sales = sales + Val(txtSales(depNum).Text)
    Next depNum
    picTotal.Cls
    picTotal.Print "Total sales were "; FormatCurrency(sales)
End Sub

Private Sub Form_Load()
    Dim depNum As Integer
    For depNum = 1 To 5
        Label1(depNum - 1).Caption = "Department" & Str(depNum)
    Next depNum
End Sub
```
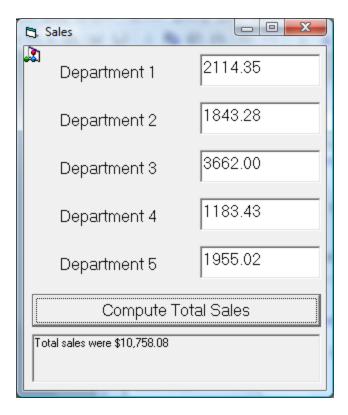
Creating Control Arrays at Run Time

- The standard unit of measurement in VB:

  1 twip ≈ 1/1440 in

- Properties of controls where it's used:

  Left, Top, Width, Height

- Use statements of the form:

  Load *controlName*(*num*)

Example

```
Private Sub cmdCompute_Click()
    Dim monthNum As Integer
    Dim sales As Single
    For monthNum = 1 To 12
        sales = sales + Val(txtInfo(monthNum - 1).Text)
    Next monthNum
    picResult.Cls
    picResult.Print "Total yearly sales were ",
        FormatCurrency(sales)
End Sub

Private Sub Form_Load()
    Dim i As Integer, monthNames As String
    monthNames = "FebMarAprMayJunJulAugSepOctNovDec"
    For i = 1 To 11
        Load lblMonth(i)
        Load txtInfo(i)
        lblMonth(i).Top = lblMonth(i - 1).Top + txtInfo(0).Height
        txtInfo(i).Top = txtInfo(i - 1).Top + txtInfo(0).Height
        lblMonth(i).Caption = Mid(monthNames, 3 * i - 2, 3)
        lblMonth(i).Visible = True
        txtInfo(i).Visible = True
    Next i
End Sub
```