

For...Next Loops

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CS 113: Introduction to Computers

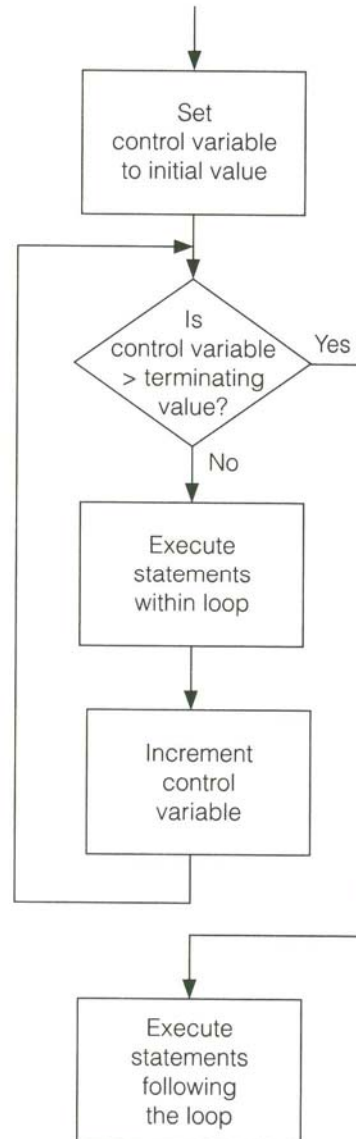
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For...Next Loops

- For...Next loops are useful when it is known how many times a loop should be executed. The general form of a For...Next loop is as follows:

```
For intIndexVar = initVal To endVal [Step intStepVal]  
    Statement(s)  
Next intIndexVar
```

For...Next Loop: A Flowchart



Example 1

```
Private Sub cmdDisplayTable_Click()  
    Dim i As Integer 'declare a counter  
    'Display a table of the first 6 numbers  
    'and their squares  
    picTable.Cls  
    For i = 1 To 6  
        picTable.Print i; i^2  
    Next i  
End Sub
```

Example 2 (Negative intStepVal):

```
Private Function Reverse(info As String) As String
    Dim m As Integer, j As Integer, temp As String
    m = Len(info)
    temp = ""
    For j = m To 1 Step -1
        temp = temp + Mid(info, j, 1)
    Next j
    Reverse = temp
End Function
```

Example 3 (Nested For...Next Loops)

```
Private Sub cmdDisplay_Click()  
    Dim j As Integer, k As Integer  
    picTable.Cls  
    For j = 1 To 9  
        For k = 1 To 9  
            PicTable.Print j; "x"; k; "="; j*k  
        Next k  
        picTable.Print 'Move to the next row  
    Next j  
End Sub
```