Control - While/Wend

While condition
<action>
....
<action>
Wend

Control - Do While/Loop

Do While condition
<action>
....
<action>
Loop

Control - Do Until/Loop

Do Until condition
<action>
....
<action>
Loop

Control - For/Next

For <counter> = <start_value> to <end_value> step <step>
<action>
....
<action>
Next <counter>

Control - Select Case

Select Case <case_variable>
Case <case_expression1>
<action1>
Case <case_expression2>
<action2>
Case <case_expression3>
....
Case <case_expression2>
<action n>
End Select
Do/Loop While

Do <actions>
Loop While <condition>

Action

Condition

True

False

Do/Loop Until

Do <actions>
Loop Until <condition>

Action

Condition

False

True

Exit Do and Exit For

• Exit Do applies to
  – Do While/Loop
  – Do/Loop While
  – Do Until/Loop
  – Do/Loop Until
• Exit For applies to
  – For/Next

Does this sorting program work?

" Purpose: Sorting an array elements
" in an ascending order

Private Sub Main()
  Dim n% As Integer
  Dim min% As Integer

  intList = Array(7, 8, 0, 2, 4, 3, 9, 1, 3, 5)

  For j = 2 To n Step 1
    If min > intList(j) Then
      imin = j
      min = intList(j)
    End If
  Next

  intList(imin) = intList(i)
  intList(i) = mini

  MsgBox("Done")
End Sub

One step further

• Does the sorting program work?
  – Yes
    • Can you implement it using the other loop control structures?
    • Are all the loop control structures equal in terms of function, ease, and readability?
  – No
    • what is wrong?
    • How do you fix it?