**Checking for Matching Parentheses**

Unless you are writing very short documents, cleaning up can be one of the hardest parts of writing. The following macro double-checks your document, paragraph by paragraph, to determine if you have a balanced number of parentheses. The macro counts the number of left parentheses in each paragraph of your document and makes sure you have the same number of right parentheses. If you don't, the macro inserts a paragraph before the unbalanced paragraph indicating the error.

Sub CheckParens()

Dim WorkPara As String

Dim CheckP() As Boolean

Dim NumPara As Integer, J As Integer

Dim LeftParens As Integer, RightParens As Integer

Dim MsgText As String

NumPara = ActiveDocument.Paragraphs.Count

ReDim CheckP(NumPara)

MsgText = "\*\*\*Unbalanced parens in the next paragraph"

For J = 1 To NumPara

CheckP(J) = False

WorkPara = ActiveDocument.Paragraphs(J).Range.Text

If Len(WorkPara) <> 0 Then

LeftParens = CountChars(WorkPara, "(")

RightParens = CountChars(WorkPara, ")")

If LeftParens <> RightParens Then CheckP(J) = True

End If

Next J

For J = NumPara To 1 Step -1

If CheckP(J) Then

Selection.HomeKey Unit:=wdStory, Extend:=wdMove

If J > 1 Then

Selection.MoveDown Unit:=wdParagraph, \_

Count:=(J - 1), Extend:=wdMove

End If

Selection.InsertParagraphBefore

Selection.MoveLeft Unit:=wdCharacter, Count:=1

Selection.Style = "Normal"

Selection.TypeText Text:=MsgText

End If

Next J

End Sub

Private Function CountChars(A As String, C As String) As Integer

Dim Count As Integer

Dim Found As Integer

Count = 0

Found = InStr(A, C)

While Found <> 0

Count = Count + 1

Found = InStr(Found + 1, A, C)

Wend

CountChars = Count

End Function

Note that there are actually two macros here. The CountChars function is called from within the main CheckParens macro. It is this latter macro (CheckParens) that is the one you should actually invoke on your document. When the macro is finished, you can search through the document, looking for the wording "\*\*\*Unbalanced parens" to see where you may have problems.

**Note**: the search parameters could be changed to look for other imbalanced objects in your writing such as { }, etc.