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Sub ValidateAndHighlight()  
    Dim ws As Worksheet  
    Dim lastRow As Long  
    Dim eanRange As Range  
    Dim cell As Range  
    Dim selectedColumn As Range  
    Dim columnLetter As String  
    ' Prompt the user to enter the column letter  
    columnLetter = InputBox("Enter the column letter containing EAN codes (e.g., A, B, C)", "Column  
Selection")  
    ' Check if the entered column letter is valid  
    If Not IsValidColumn(columnLetter) Then  
        MsgBox "Invalid column letter. Exiting macro."  
        Exit Sub  
    End If  
    ' Set the active sheet  
    Set ws = ActiveSheet  
    ' Find the last row in the selected column  
    lastRow = ws.Cells(ws.Rows.Count, columnLetter).End(xlUp).Row  
    ' Set the range of EAN codes  
    Set eanRange = ws.Range(columnLetter & "2:" & columnLetter & lastRow)  
    ' Loop through each cell in the range  
    For Each cell In eanRange  
        ' Skip blank cells  
        If Not IsEmpty(cell) Then  
            Dim ean As String  
            ean = CStr(cell.Value)  
            ' Check validity of EANs and add zeros  
            If IsNumeric(ean) And Len(ean) <= 13 And Left(ean, 1) <> "2" And Mid(ean, 1, 3) <> "000" And  
Mid(ean, 3, 5) <> "00000" And Mid(ean, 8, 5) <> "00000" Then  
                ' Add zeros to make it at least 13 digits long  
                Dim newEAN As String  
                newEAN = WorksheetFunction.Rept("0", 13 - Len(ean)) & ean  
                ' Check validity of the new EAN  
                If IsNumeric(newEAN) And Len(newEAN) = 13 And Left(newEAN, 1) <> "2" And Mid(newEAN,  
1, 3) <> "000" And Mid(newEAN, 3, 5) <> "00000" And Mid(newEAN, 8, 5) <> "00000" Then  
                    ' New EAN is valid  
                    cell.Value = newEAN  
                Else  
                    ' Invalid EAN, highlight the cell  
                    With cell.Interior  
                        .Pattern = xlSolid  
                        .Color = RGB(128, 0, 128) ' Purple background color  
                    End With  
                    With cell.Font  
                        .Color = RGB(255, 255, 255) ' White text color  
                    End With  
                End If  
            Else  
                ' Invalid EAN, highlight the cell  
                With cell.Interior  
                    .Pattern = xlSolid  
                    .Color = RGB(128, 0, 128) ' Purple background color  
                End With  
                With cell.Font  
                    .Color = RGB(255, 255, 255) ' White text color  
                End With  
            End If  
        End If  
    Next cell  
End Sub  
Function IsValidColumn(ByVal columnLetter As String) As Boolean  
    ' Check if the column letter is between A and XFD (the last column)  
    If Len(columnLetter) = 1 And columnLetter Like "[A-Za-z]" Then  
        IsValidColumn = True  
    Else  
        IsValidColumn = False  
    End If  
End Function
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