Microsoft Excel VBA and Macros

# **Project 3: Looping Formulas through All Sheets**

In this project we’ll start with creating two first for adding headers and another for formatting it. Then we move towards adding a VBA code for looping through all the sheets and automating our task. Finally we’ll copy reports from every sheet and make a yearly report sheet.

## **Step 1: Create a Copy of sheet to Record Macros**

## **Step 2: Record Macros for Adding Headers**

### VBA Code For Adding Headers

*Sub AddHeaders()*

*'*

*' AddHeaders Macro*

*'*

*'*

*Rows("1:1").Select*

*Selection.Insert Shift:=xlDown*

*ActiveWindow.SmallScroll Down:=-3*

*Range("A1").Select*

*ActiveCell.FormulaR1C1 = "Division"*

*Range("B1").Select*

*ActiveCell.FormulaR1C1 = "Category"*

*Range("C1").Select*

*ActiveCell.FormulaR1C1 = "Jan"*

*Range("D1").Select*

*ActiveCell.FormulaR1C1 = "Feb"*

*Range("E1").Select*

*ActiveCell.FormulaR1C1 = "Mar"*

*Range("F1").Select*

*ActiveCell.FormulaR1C1 = "Total Expense"*

*Range("A2").Select*

*End Sub*

## **Step 3: Record Macros for Formatting Headers**

### VBA Code For Formatting Headers

*Sub FormatData()*

*'*

*' FormatData Macro*

*'*

*'*

*Range("A1:F1").Select*

*With Selection.Interior*

*.Pattern = xlSolid*

*.PatternColorIndex = xlAutomatic*

*.ThemeColor = xlThemeColorAccent1*

*.TintAndShade = -0.249977111117893*

*.PatternTintAndShade = 0*

*End With*

*With Selection.Font*

*.ThemeColor = xlThemeColorDark1*

*.TintAndShade = 0*

*End With*

*Selection.Font.Bold = True*

*Selection.Borders(xlDiagonalDown).LineStyle = xlNone*

*Selection.Borders(xlDiagonalUp).LineStyle = xlNone*

*Selection.Borders(xlEdgeLeft).LineStyle = xlNone*

*Selection.Borders(xlEdgeTop).LineStyle = xlNone*

*With Selection.Borders(xlEdgeBottom)*

*.LineStyle = xlContinuous*

*.ColorIndex = 0*

*.TintAndShade = 0*

*.Weight = xlMedium*

*End With*

*Selection.Borders(xlEdgeRight).LineStyle = xlNone*

*Selection.Borders(xlInsideVertical).LineStyle = xlNone*

*Selection.Borders(xlInsideHorizontal).LineStyle = xlNone*

*Range("C2").Select*

*Range(Selection, Selection.End(xlDown)).Select*

*Range(Selection, Selection.End(xlToRight)).Select*

*Selection.Style = "Currency"*

*Range("A2").Select*

*End Sub*

## **Step 4: Create VBA Code for AutoSum**

### VBA Code For AutoSum Feature

*Public Sub AutoSum()*

*Dim LastCell As String*

*Range("F2").Select*

*Selection.End(xlDown).Select*

*LastCell = ActiveCell.Address*

*ActiveCell.Offset(1, 0).Select*

*ActiveCell.Value = "=SUM(F2:" + LastCell + ")"*

*ActiveCell.Font.Bold = True*

*End Sub*

## **Step 5: Create Final VBA Code For Loops and Functions**

### VBA Code For Looping Through Sheets Applying Functions and Copying

## **Step 6: Apply and Save Macros**

* Developer > Code Block > Macros > Choose > Apply
* Click Save As > Change File Type > Save as Macros Enabled Worksheets

*Public Sub FinalReportLoop()*

*Dim i As Integer*

*i = 1*

*Do While i <= Worksheets.Count - 1*

*Worksheets(i).Select*

*' Apply Functions*

*AddHeaders*

*FormatData*

*AutoSum*

*' Copy Data*

*Range("A1").Select*

*Selection.CurrentRegion.Select*

*Selection.Copy*

*' Move to Final Report Sheet*

*Worksheets("Yearly Report").Select*

*' Paste Data*

*Range("A50000").Select*

*Selection.End(xlUp).Select*

*ActiveCell.Offset(4, 0).Select*

*ActiveSheet.Paste*

*i = i + 1*

*Loop*

*' Autofit The Columns*

*Columns("A:F").EntireColumn.AutoFit*

*End Sub*