Week 3 Quiz

TOTAL POINTS 5

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1. Twelve workbooks (January through December) exist in a folder on your computer. Each workbook is named with the format **"MM-2017.xlsx"**, where **"MM"** is the month (01 through 12). Each workbook has between 3 and 6 worksheets (varies for each workbook). Each of the workbooks has the first worksheet named **"Basic Data"** and the other sheets are named **"Trial X"**, where X can range from 1 to 5.

   You wish to create a subroutine called **"ExtractData"** that averages the contents of cell **A1** from the worksheets and workbooks in the folder and places the average into cell **A1** of the main file (**ThisWorkbook**). However, you only wish to extract the data from _even months and odd values of X_.

   You have created the **ExtractData** subroutine shown below. What code should be placed in the two spots **"What code goes here?"** to make this subroutine work properly? Select one of the options for **a)** below and one of the options for **b)**.

```vba
Option Explicit

Sub ExtractData()
Dim Folder As String, FileName As String
Dim tWB As Workbook, aWB As Workbook
Dim nw As Integer, i As Integer
Dim s As Integer, c As Integer
Set tWB = ThisWorkbook
Folder = "C:\Users\Bert&Ernie\Documents\Data_Files"
FileName = Dir(Folder & "\*.xlsx")
Do
    If    a) What code goes here?
        Workbooks.Open Folder & "\" & FileName
        Set aWB = ActiveWorkbook
        nw = aWB.Worksheets.Count
        For i = 2 To nw
            If    b) What code goes here?
                s = s + Worksheets(i).Range("A1")
                c = c + 1
            End If
        Next i
        aWB.Close SaveChanges:=False
    End If
    FileName = Dir
Loop Until FileName = ""
MsgBox s / c
End Sub
```

   ☐ a) **Left(FileName, 2) Mod 2 = 0 Then**

☑ b) **Left(FileName, 2) Mod 2 = 0 Then**

☐ b) **Right(Worksheets(i).Name, 1) Mod 2 = 1 Then**

☐ a) **Left(FileName, 2) Mod 2 = 1 Then**

☑ a) **Right(Worksheets(i).Name, 1) Mod 2 = 1 Then**

☐ b) **Right(Worksheets(i).Name, 1) Mod 2 = 0 Then**

2. Which of the following statements regarding the material in this module are TRUE? Select all that apply.

1 point

☑ In the workbook shown, **Worksheets(1).Name** is equivalent to **Sheets("Main").Name**

	A	B	C
1	1	2	3
2	4	5	6
3	7	8	9
4			
5			
6			

Main Sheet2 Sheet3

☑ **Sheets.Count** and **Worksheets.Count** will always provide the same result.

☑ **Workbooks.Count** will display the number of currently open workbooks.

☑ Multiple workbooks are open and each has multiple worksheets. The VBA statement **MsgBox Sheets("Sheet1").Range("A1")** will display the contents of cell **A1** of the workbook that the code is written in (**ThisWorkbook**), regardless of the current active workbook.

✓ A workbook has 3 worksheets and each worksheet has an integer in cell **B2**. If you wished to sum those three numbers, the following code would successfully do this:

```
Sub SumNumbers()
Dim w As Worksheet, s As Integer
For Each w In Worksheets
    s = s + Range("B2")
Next
MsgBox s
End Sub
```

3. There are two workbooks in the **Data_Files** folder (**File1.xlsx** and **File2.xlsx**). The following code is written within the file **Main.xlsm**. After the code has executed, which file will be the active workbook?

1 point

```
Option Explicit

Sub OpenFiles()
Dim FileName1 As String, FileName2 As String
Dim a As Workbook, b As Workbook, c As Workbook
FileName1 = "C:\Users\Bert&Ernie\Documents\Data_Files\File2.xlsx"
FileName2 = "C:\Users\Bert&Ernie\Documents\Data_Files\File1.xlsx"
Workbooks.Open FileName1
Set c = ActiveWorkbook
Workbooks.Open FileName2
Workbooks(3).Activate
Set a = ActiveWorkbook
MsgBox c.Worksheets(1).Name
c.Close SaveChanges:=False
Set b = ThisWorkbook
End Sub
```

○ **Main.xlsm**

◉ **File1.xlsx**

○ **File2.xlsx**

4. Which of the following subroutines will count the total number of worksheets in all open workbooks? Select all that apply.

1 point

☑ Will this work?

```vba
Option Explicit

Sub CountTotalOpenWorksheets()
Dim wb As Workbook
Dim c As Integer
For Each wb In Workbooks
    c = c + wb.Worksheets.Count
Next
MsgBox c
End Sub
```

☑ Will this work?

```vba
Option Explicit

Sub CountTotalOpenWorksheets()
Dim i As Integer, j As Integer
Dim c As Integer
For i = 1 To Workbooks.Count
    For j = 1 To Worksheets.Count
        c = c + 1
    Next j
Next i
MsgBox c
End Sub
```
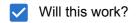
☑ Will this work?

```vba
Option Explicit

Sub CountTotalOpenWorksheets()
Dim nb As Integer, ws As Worksheet
Dim c As Integer, i As Integer
nb = Workbooks.Count
For i = 1 To nb
    c = c + Workbooks(i).Worksheets.Count
Next i
MsgBox c
End Sub
```

☑ Will this work?

```vba
Option Explicit
Option Base 1

Sub ConsolidateData()
Dim A() As String, i As Integer, n As Integer
n = Worksheets.Count
ReDim A(n - 1) As String
Worksheets(1).Range("A1").Select
For i = 2 To n
    A(i - 1) = Worksheets(i).Range("A1")
Next i
For i = 1 To n - 1
    ActiveCell.Offset(i - 1, 0) = A(i)
Next i
End Sub
```

☑ Will this work?

```
Option Explicit

Sub CountTotalOpenWorksheets()
Dim n As Integer, wb As Workbook
Dim c As Integer, ns As Integer, i As Integer
ns = Worksheets.Count
For i = 1 To ns
    c = c + Worksheets(i).Workbooks.Count
Next i
MsgBox c
End Sub
```

5. Which of the following statements regarding the material in this module are **TRUE**? Select all that apply.

(1 point)

☑ The **Application.GetOpenFilename** method can only be used to open one file at a time.

☑ **Sheets("Sheet1").Name = "Main"** could be used to rename **Sheet1** with the name "Main"

☑ If I wished to close the file "**User_Data.xlsx**", I could use **Close "User_Data.xlsx"** in my VBA code.

☑ **Sheets("Sheet2").Visible = False** will hide **Sheet2**.

☑ If I wished to close the most recent workbook opened, I could use the following line of VBA code:

Workbooks(Workbooks.Count).Close SaveChanges:=False

☑ I, **JAY PATEL**, understand that submitting work that isn't my own may result in permanent failure of this course or deactivation of my Coursera account.

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