

Suppose you're working with data of products for ACME Corporation. The data is shown in the excel file "ioe373-hw6." You have the following task to organize the information:

- Remove any empty rows in the raw data (sheet "Data")
- Automate the process of creating a summary of Revenue, Cost of Goods Sold (COGS) and Profit (Revenue – COGS) by region and product. Regions should go down the side (rows), products across the top (columns). The data fields should have a row orientation.

Please check the sample code for creating a pivot table (ioe373-lec12- example6.xlsm)

- Create the pivot table in a new sheet. Name the new sheet "PivotWorkSheet" Make sure that you remove any previous sheets containing a pivot table.
- Use one single button on the worksheet and/or a userform to trigger first the subroutine to remove the empty rows and then the subroutine to create the pivot table.

Deliverables: 1) Copy your VBA code and paste to this word file, submit it on Canvas. 2) Save your VBA code and worksheet with the values as a Macro-Enabled worksheet. Submit it along with your word file on Canvas.

VBA CODE

Option Explicit

Sub DeleteEmptyRows()

Dim LastRow As Long

Dim r As Long

Dim Counter As Long

Dim ans As Variant

Application.ScreenUpdating = False

LastRow = ActiveSheet.UsedRange.Rows.Count + _

ActiveSheet.UsedRange.Rows(1).Row - 1

For r = LastRow To 1 Step -1

If Application.WorksheetFunction.CountA(Rows(r)) = 0 Then

Rows(r).Delete

Counter = Counter + 1

End If

Next r

Application.ScreenUpdating = True

End Sub

Sub CreatePivotTable()

Dim PTcache As PivotCache

Dim pt As PivotTable

Application.ScreenUpdating = False

' Delete PivotSheet if it exists

On Error Resume Next

Application.DisplayAlerts = False

Sheets("PivotSheet").Delete

' Create a Pivot Cache

Set PTcache = ActiveWorkbook.PivotCaches.Create(_

Source:=xlDatabase, _

SourceData:=Range("A1").CurrentRegion.Address)

' Add new worksheet

Worksheets.Add

ActiveSheet.Name = "PivotWorkSheet"

ActiveWindow.DisplayGridlines = False

' Create the Pivot Table from the Cache

```
Set pt = ActiveSheet.PivotTables.Add( _  
    PivotCache:=PTcache, _  
    TableDestination:=Range("A1"), _  
    TableName:="Summary")
```

With pt

' Add fields

```
.PivotFields("Region").Orientation = xlRowField  
.PivotFields("Product").Orientation = xlColumnField  
.PivotFields("Revenue").Orientation = xlDataField  
.PivotFields("COGS").Orientation = xlDataField  
.DataPivotField.Orientation = xlColumnField
```

' Profit = Revenue - COGS

```
.CalculatedFields.Add "Profit", "=Revenue-COGS"  
.PivotFields("Profit").Orientation = xlDataField
```

' Specify a number format

```
.DataBodyRange.NumberFormat = "0,000"
```

' Apply a style

```
.TableStyle2 = "PivotStyleMedium2"
```

' Hide Field Headers

```
.DisplayFieldCaptions = False
```

```
.PivotFields("Sum of Revenue").Caption = " Revenue"
```

```
.PivotFields("Sum of COGS").Caption = " COGS"
```

```
.PivotFields("Sum of Profit").Caption = " Profit"
```

```
End With
```

```
Application.ScreenUpdating = True
```

```
End Sub
```

```
Sub ButtonDeleteRowsAndCreateTable()
```

```
DeleteEmptyRows
```

```
CreatePivotTable
```

```
End Sub
```