**Excel Assignment – 21**

1. Write a VBA code to enter your name in A1 Cell using Input Box and once you enter the name display a message box that says the name has been entered.

**Ans:** Sub Input\_Box()

Dim i As Variant

i = InputBox("Please Enter Your Name")

Range("A1").Value = i

MsgBox "Your Name has been entered.Thank You."

End Sub

1. What are Userforms? Why are they used? How to fill a list box using for loop.

**Ans:** Userform in VBA are customized user-defined forms made to take input from a user in a form format. Although it has different sets of controls to add, such as text boxes, checkboxes labels, etc., to guide a user to input a value and store the value in the worksheet, every part of the UserForm has a unique code with it.

It allows us to build a professional looking user interface to communicate with the users of our VBA application.  It also allows us to totally control the user in what they are doing to our workbook.

In VBA, to loop through an array we can use the For Loop (For Next). And to write this loop code we need to know the size of the array (upper and lower bound) so that we can use both as the counter for the loop. Basically, for loop will start from the first element of the array and loop up to the last.

1. What is an array? Write a VBA code to enter students and their marks from the below table.

**Ans:** In VBA, an array is a variable that can store multiple values. We can access all the values from that array at once or we can also access a single value by specifying its index number which is the position of that value in the array.

VBA Code for entering student & their marks: In the assignment PDF copy no table showing & hence taken data as per my knowledge.

Sub StudentMarksTable()

Dim A, B As String

A = InputBox("Student Name: ")

B = InputBox("Marks: ")

Range("A1").Value = A

Range("B1").Value = B

End Sub

1. Use the following data to create a pie chart using VBA code. Use Font - ‘Times new Roman’, Size -14, Bold, Title - Piechart’ and you are per to use colours as per your taste.

**Ans:**

Sub Charts\_Example1()

Dim MyChart As Chart

Set MyChart = Charts.Add

With MyChart

.SetSourceData Sheets("Sheet1").Range("A2:B9")

.ChartType = xlPie

.ChartTitle.Text = "Pie chart"

ActiveChart.SetElement msoElementDataLabelInsideEnd

.ChartArea.Format.TextFrame2.TextRange.Font.Name = "Times New Roman"

.ChartArea.Format.TextFrame2.TextRange.Font.Bold = True

.ChartArea.Format.TextFrame2.TextRange.Font.Size = 14

End With

End Sub

1. Check the dataset in the link given below and create a pivot table using VBA showing the sales for the year from stationary category. https://docs.google.com/spreadsheets/d/1IRSEnmgz8Ro276- GslknRNk0zlrB5CZH1YrnT71kqFM/edit?usp=sharing

**Ans:** Sub InsertPivotTable()

Dim PSheet As Worksheet

Dim DSheet As Worksheet

Dim PCache As PivotCache

Dim PTable As PivotTable

Dim PRange As Range

Dim LastRow As Long

Dim LastCol As Long

On Error Resume Next

Application.DisplayAlerts = False

Worksheets("PivotTable").Delete

Sheets.Add Before:=ActiveSheet

ActiveSheet.Name = "PivotTable"

Application.DisplayAlerts = True

Set PSheet = Worksheets("PivotTable")

Set DSheet = Worksheets("Data")

LastRow = DSheet.Cells(Rows.Count, 1).End(xlUp).Row

LastCol = DSheet.Cells(1, Columns.Count).End(xlToLeft).Column

Set PRange = DSheet.Cells(1, 1).Resize(LastRow, LastCol)

Set PCache = ActiveWorkbook.PivotCaches.Create \_

(SourceType:=xlDatabase, SourceData:=PRange). \_

CreatePivotTable(TableDestination:=PSheet.Cells(2, 2), \_

TableName:="SalesPivotTable")

Set PTable = PCache.CreatePivotTable \_

(TableDestination:=PSheet.Cells(1, 1), TableName:="SalesPivotTable")

With ActiveSheet.PivotTables("SalesPivotTable").PivotFields("Category")

.Orientation = xlRowField

.Position = 1

End With

'Insert Column Fields

With ActiveSheet.PivotTables("SalesPivotTable").PivotFields("Product")

.Orientation = xlColumnField

.Position = 1

End With

With ActiveSheet.PivotTables("SalesPivotTable").PivotFields("Stationary")

.Orientation = xlPageField

.Position = 2

End With

'Insert Data Field

With ActiveSheet.PivotTables("SalesPivotTable").PivotFields("Amount")

.Orientation = xlDataField

.Function = xlSum

.NumberFormat = "#,##0"

.Name = "Total Sale "

End With

'Format Pivot Table

ActiveSheet.PivotTables("SalesPivotTable").ShowTableStyleRowStripes = True

ActiveSheet.PivotTables("SalesPivotTable").TableStyle2 = "PivotStyleMedium9"

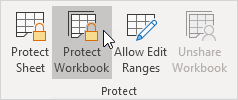
End Sub

6. Write step by step procedure to protect your workbook using a password.

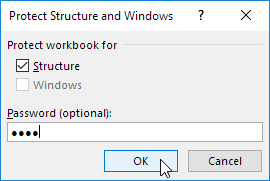
**Ans:** Procedure to protect your workbook using a password

1. Open a workbook.

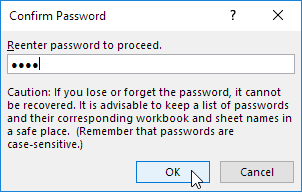
2. On the Review tab, in the Protect group, click Protect Workbook.



3. Check Structure, enter a password and click OK.



4. Reenter the password and click on OK.



.

