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.

Here is the VBA code to enter your name in cell A1 using an Input Box:

Sub EnterName() Dim name As String name = InputBox("Please enter your name:", "Enter Name") Range("A1").Value = name MsgBox "Your name has been entered in cell A1" End Sub

To run the code, you can press the F5 key or go to the Run menu and select Run Sub/UserForm.

2. What are Userforms? Why are they used? How to fill a list box using

for loop.

Userforms are customizable forms used in VBA for interaction with the user. They provide a way for the user to input data, select options, or provide information to the VBA program. They are used when there is a need for a more sophisticated user interface than a message box or an input box can provide.

To fill a list box using a for loop, the following steps can be followed:

In the VBA Editor, create a new Userform.

From the Toolbox, drag and drop a List Box control onto the Userform.

In the code window of the Userform, create a new subroutine to populate the List Box.

Use a For loop to iterate over a range of values or data, adding each value to the List Box.

Call the subroutine to populate the List Box when the Userform is loaded or when a button is clicked.

Here is an example code to fill a list box with the numbers 1 to 10 using a For loop:

Private Sub UserForm\_Initialize() For i = 1 To 10 Me.ListBox1.AddItem i Next i End Sub

3. What is an array? Write a VBA code to enter students and their marks

from the below table.

An array in VBA is a collection of variables stored in a single memory location. A VBA code to enter students and their marks could be as follows:

Sub EnterMarks() Dim studentName(1 To 5) As String Dim marks(1 To 5) As Integer For i = 1 To 5 studentName(i) = InputBox("Enter student name") marks(i) = InputBox("Enter marks") Next i End Sub

4. 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.

Here is a VBA code to create a pie chart using the given data:

Sub PieChart() Dim data(1 To 4) As Double data(1) = 10 data(2) = 20 data(3) = 30 data(4) = 40 With ActiveSheet.Shapes.AddChart2(251, xlPie, 250, 50, 350, 250).Chart .SetSourceData Source:=Range("A1:D1") .ChartTitle.Text = "Piechart" .ChartTitle.Font.Name = "Times New Roman" .ChartTitle.Font.Size = 14 .ChartTitle.Font.Bold = True .ChartTitle.Font.Color = RGB(0, 0, 0) End With End Sub

5. 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

Here is a VBA code to create a pivot table showing the sales for the year from the stationary category:

vbnetCopy code

Sub CreatePivot() Dim dataRange As Range Set dataRange = Range("A1:C100") With dataRange With .Parent.PivotTableWizard(SourceType:=xlDatabase, SourceData:=.Resize(.Rows.Count - 1, 3), TableDestination:="Sheet2!A3", TableName:="PivotTable1") With .PivotFields("Category") .Orientation = xlRowField .Position = 1 End With With .PivotFields("Sales") .Orientation = xlDataField .Function = xlSum .NumberFormat = "#,##0.00" .Position = 1 End With With .PivotFields("Year") .Orientation = xlColumnField .Position = 1 End With End With End With End Sub

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

password.

Here is a step-by-step procedure to protect your workbook using a password:

Go to the "Review" tab in Excel.

Click on "Protect Workbook."

Choose "Encrypt with Password."

Enter the password you want to use for the workbook.

Confirm the password.

Save the workbook.

Note: If you forget the password, the workbook cannot be recovered, so it is important to remember it.