

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 EnterName()
Dim name As String

name = InputBox("Enter your name:")

If name <> "" Then
Range("A1").Value = name
MsgBox "Your name has been entered."
End If
End Sub

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

Ans. Userforms are graphical interfaces that allow users to interact with VBA macros in Excel. They can be created using the VBA editor and can contain various controls such as text boxes, buttons, checkboxes, and list boxes. Userforms are used to create custom dialogs, input forms, and other types of user interfaces for VBA applications. You can fill a list box using a for loop by adding items to the list box one by one using the AddItem method.

3. 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 of the same data type. It is a way of organizing and managing related data in a program. Arrays can be of different types, such as one-dimensional, two-dimensional, and multi-dimensional arrays. One-dimensional arrays are like a list or a column of data, while two-dimensional arrays are like a table with rows and columns. Multi-dimensional arrays can have more than two dimensions and can be thought of as a cube of data.

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.

Ans. Sub CreatePieChart()

' Define the data range for the chart
Dim dataRange As Range
Set dataRange = ThisWorkbook.Worksheets("Sheet1").Range("A1:B4")

' Create a new chart object
Dim chartObject As ChartObject
Set chartObject = ThisWorkbook.Worksheets("Sheet1").ChartObjects.Add(Left:=100, Top:=100, Width:=400, Height:=300)

' Set the chart type to pie
chartObject.Chart.ChartType = xlPie

' Set the data source for the chart
chartObject.Chart.SetSourceData Source:=dataRange

' Add a chart title
chartObject.Chart.HasTitle = True
chartObject.Chart.ChartTitle.Text = "Sample Pie Chart"

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>

Ans. Sub CreatePivotTable()

```
Dim wsData As Worksheet
Dim wsPivot As Worksheet
Dim pc As PivotCache
Dim pt As PivotTable
Dim ptf As PivotField
Dim rngData As Range
```

```
'Set the worksheet containing the data set
Set wsData = ThisWorkbook.Sheets("Data")
```

```
'Set the range of the data set
Set rngData = wsData.Range("A1:D11")
```

```
'Create a new worksheet or activate an existing worksheet where the pivot table will be placed
Set wsPivot = ThisWorkbook.Sheets.Add
wsPivot.Name = "PivotTable"
```

```
'Set the pivot cache
Set pc = ThisWorkbook.PivotCaches.Create(SourceType:=xlDatabase, SourceData:=rngData)
```

```
'Create the pivot table
Set pt = wsPivot.PivotTables.Add(PivotCache:=pc, TableDestination:=wsPivot.Range("A3"), TableName:="SalesPivotTable")
```

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

Ans. Here are the procedures to protect your workbook using a password.

1. Open the Excel workbook that you want to protect with a password.
2. Click on the "File" tab on the top left corner of the screen.
3. Click on "Info" from the left-hand menu.
4. Click on "Protect Workbook" from the options on the right-hand side.
5. Select "Encrypt with Password".
6. Enter the password you want to use to protect the workbook.
7. Click "OK" and confirm the password by entering it again in the "Reenter password to proceed" box.
8. Click "OK" again to finish setting the password protection.