



Excel

Assignment-21

iNeuron

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:- Here is the VBA code to achieve this:

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

This code uses the InputBox function to prompt the user to enter their name, which is then stored in a variable called name. The Range function is used to specify that the name should be entered into cell A1. Finally, the MsgBox function displays a message indicating that the name has been entered.

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

Ans:- Userforms are custom dialog boxes in Microsoft Excel that allow users to interact with an Excel spreadsheet in a more user-friendly manner. They are used to create custom interfaces for collecting user input or for displaying information to the user.

Userforms are created in the Visual Basic Editor (VBE) and consist of controls such as text boxes, combo boxes, check boxes, and list boxes. They are used to create a custom interface that can improve the user experience, increase the efficiency of data entry and display, and provide a more professional look and feel to your spreadsheet.

Here is an example of how to fill a list box using a For loop in VBA:

```
Sub FillListBox()  
  
    Dim i As Integer  
  
    For i = 1 To 10  
  
        Me.ListBox1.AddItem "Item " & i  
  
    Next i  
  
End Sub
```

In this code, a For loop is used to loop through the numbers 1 to 10. For each iteration of the loop, the AddItem method of the ListBox1 control is used to add an item to the list box with a label of "Item" followed by the loop counter.

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

Ans:- An array is a collection of values of the same data type. In VBA, arrays can be used to store a large amount of related data in a single variable. Arrays are useful when you want to perform operations on many related values at once, rather than performing operations on individual values one by one.

Here is an example of VBA code to enter student names and their marks from the table:

```
Sub EnterStudentData()  
  
    Dim students(1 To 3) As String  
  
    Dim marks(1 To 3) As Integer
```

```
students(1) = "John"
```

```
students(2) = "Jane"
```

```
students(3) = "Jim"
```

```
marks(1) = 85
```

```
marks(2) = 90
```

```
marks(3) = 95
```

```
Range("A1").Value = "Student Name"
```

```
Range("B1").Value = "Marks"
```

```
For i = 1 To 3
```

```
Range("A" & (i + 1)).Value = students(i)
```

```
Range("B" & (i + 1)).Value = marks(i)
```

```
Next i
```

```
End Sub
```

In this code, two arrays are declared: students and marks. The values of the arrays are assigned, with students containing the names of the students, and marks containing the marks of the students. The values in the arrays are then written to cells in the worksheet, with the first row containing the headers "Student Name" and "Marks", and the subsequent rows containing the values from the arrays. The For loop is used to loop through the arrays and write the values to the worksheet.

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

Ans:- Here is an example of VBA code to create a pie chart from the given data using the specified font and title:

```

Sub CreatePieChart()

    Dim data(1 To 3) As Integer

    data(1) = 50

    data(2) = 60

    data(3) = 70

    Dim chart As Chart

    Set chart = Charts.Add

    With chart

        .ChartType = xlPie

        .SetSourceData Source:=Range("A1:A3")

        .HasTitle = True

        .ChartTitle.Text = "Pie Chart"

        .ChartTitle.Font.Name = "Times New Roman"

        .ChartTitle.Font.Size = 14

        .ChartTitle.Font.Bold = True

    End With

    chart.Parent.Select

End Sub

```

In this code, an array data is declared to store the data for the chart. The values of the array are then used to create a new chart using the Charts.Add method. The chart type is set to xlPie, the data source is specified

using the `SetSourceData` method, and the chart title properties are set, including the font name, size, and boldness. Finally, the parent of the chart object is selected to display the chart. Note that you can use different colors as per your taste by changing the `SeriesCollection` fill color property of the chart.

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

Ans:- Here are the steps to protect your workbook using a password in Microsoft Excel:

1. Open the workbook you want to protect.
2. Click on the "File" tab and select "Info."
3. Click on "Protect Workbook" and then "Encrypt with Password."
4. Enter a password in the "Encrypt with Password" dialog box.
5. Re-enter the password to confirm it.
6. Click "OK" to close the dialog box.
7. Save the workbook.

Once the workbook is protected with a password, any attempt to open the workbook will require the password to be entered. You should choose a strong password and keep it in a safe place to ensure that only authorized users can access the workbook. If you forget the password, it cannot be recovered, so be sure to remember it or store it securely.

