

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-VBA code is

```
Sub EnterNameAndDisplayMessage()
```

```
    Dim userName As String
```

```
    ' Prompt the user to enter their name
```

```
    userName = InputBox("Please enter your name:", "Enter Name")
```

' Check if the user entered a name

If userName <> "" Then

' Place the entered name in cell A1

Range("A1").Value = username

' Display a message box to confirm the name has been entered

MsgBox "Name has been entered: " & userName

Else

' Display a message if the user didn't enter a name

MsgBox "No name 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 custom dialogue boxes that can be created and displayed within excel.

VBA UserForm

The screenshot displays the VBA UserForm editor interface. On the left, a UserForm titled "INPUT Data" is visible, featuring three text boxes labeled "NAME", "AGE", and "GENDER", and two buttons labeled "Submit" and "Cancel". The "Run" button in the toolbar is highlighted with a yellow box and labeled "Run Sub/UserForm (F5)". On the right, the VBA code window shows the following code:

```
CommandButton1

Private Sub CommandButton1_Click()
    Dim A As Long
    A = Cells(Rows.Count, 1).End(xlUp).Row + 1
    Cells(A, 1).Value = Nameva.Value
    Cells(A, 2).Value = Ageva.Value
    Cells(A, 3).Value = Genderva.Value
    Nameva.Value = ""
    Ageva.Value = ""
    Genderva.Value = ""
End Sub

CommandButton2

Private Sub CommandButton2_Click()
    UserForm1.Hide
End Sub
```

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

Ans- Array is a data structure that stores collection of same elements.

VBA Code is

```
Sub EnterStudentsAndMarks()
```

```
    ' Define an array to store student data
```

```
    Dim studentData() As Variant
```

```
    Dim numRows As Long
```

```
    ' Determine the number of rows in the table (adjust the sheet and  
    range accordingly)
```

```
    numRows =  
    ThisWorkbook.Sheets("Sheet1").Range("A1").CurrentRegion.Rows.Count
```

```
    ' Resize the array to match the number of rows
```

```
    ReDim studentData(1 To numRows, 1 To 2)
```

' Loop through the table and populate the array

Dim i As Long

For i = 1 To numRows

 studentData(i, 1) = ThisWorkbook.Sheets("Sheet1").Cells(i, 1).Value '
Student Name

 studentData(i, 2) = ThisWorkbook.Sheets("Sheet1").Cells(i, 2).Value '
Marks

Next i

' Example: Display the student data in the Immediate window

For i = 1 To numRows

 Debug.Print "Student Name: " & studentData(i, 1) & ", Marks: " &
studentData(i, 2)

Next i

End Sub



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

Ans- Click on Review tab>Protect Workbook>protect Structure and Windows>Enter Password in Password field

Protect Workbook in Excel

