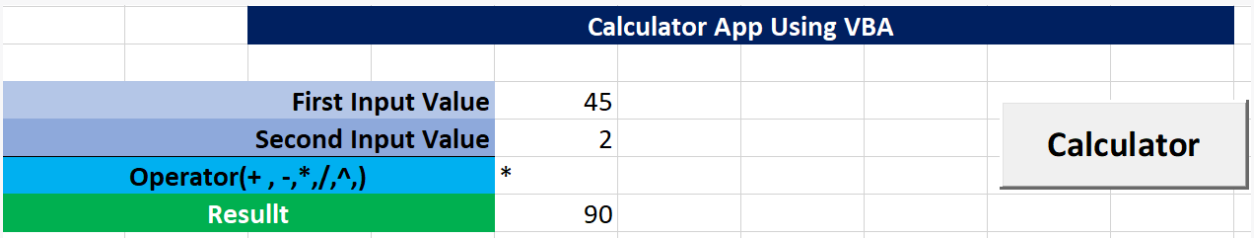
Assignment- 9
Enhancing Calculator Application in VBA

Task:

You are tasked with enhancing an existing Calculator application developed using VBA. The application allows users to perform basic mathematical operations such as addition, subtraction, multiplication, and division. Your goal is to extend the functionality of the calculator by adding support for additional operators, including exponentiation and modulus.

Excel File URL: https://github.com/Learn-With-Karthik/NCPL-DataAnalytics/blob/main/Excel-Data%20Analysis%20using%20VBA/Assignment-9%20VBA.xlsm

Note: Download the Dataset from **Excel File URL**



Instructions:

1. Study the given VBA code for the existing Calculator application. Familiarize yourself with the variables, input prompts, and calculation logic.
2. Modify the code to include support for the following operators:
    - Addition (+): The existing code already handles this operator.
    - Subtraction (-): Add the necessary code to perform subtraction between the two input numbers.
    - Multiplication (*): Add the necessary code to perform multiplication between the two input numbers.
    - Division (/): The existing code already handles this operator, including division by zero error handling.
    - Exponentiation (^): Add the necessary code to calculate the result of raising the first input number to the power of the second input number.
    - Modulus (%): Add the necessary code to calculate the remainder when dividing the first input number by the second input number.
3. Test the enhanced Calculator application by running it and verifying the correctness of the calculations.
4. Document your code modifications with comments, explaining the purpose and functionality of each section.
5. Optionally, you can further enhance the user interface of the Calculator application by adding buttons and labels to display the inputs and results.

Note: Make sure to test your code thoroughly and handle any potential errors or edge cases.

Sample VBA Code:

To Edit VBA Code ->Developer Tap->Design Mode ->View Code

```
Private Sub Calculate_function_Click()
   Dim num1 As Double
   Dim num2 As Double
   Dim operator As String
   Dim result As Double

   ' Get the input from the user

   num1 = InputBox("Enter the first number:")
   Range("Write your Range").Value = num1
   operator = InputBox("Enter the operator (+, -, *, /):")
   Range("Write your Range").Value = operator
   num2 = InputBox("Enter the second number:")
   Range("Write your Range").Value = num2

   ' Perform the calculation based on the operator

   Select Case operator
      Case "+"
         result = num1 + num2
      'TO DO Write Your Code Here for -, *,^ operator

      Case "/"
         If num2 <> 0 Then
            result = num1 / num2
         Else
            MsgBox "Error: Division by zero!"
            Exit Sub
         End If
      Case Else
         MsgBox "Error: Invalid operator!"
         Exit Sub
   End Select

   ' Display the result
   'MsgBox "Result: " & result

   Range("E7").Value = result
End Sub
```