

ANKARA UNIVERSITY COM1001 LAB 11

Question2: Write a Python program to create a desktop application based on the following requirements:

1. **Objective:**

Create a GUI application where users can select a mathematical operation, enter numbers, and get the result based on the selected operation.

2. **Requirements:**

○ **User Interface (GUI):**

- The main window should have the title "Mathematical Operation App".
- The window size should be 400x250 pixels.

○ **Operation Selection:**

- Use a dropdown menu to allow users to select a mathematical operation.
- Operations: "Addition", "Subtraction", "Multiplication", "Division"
- The default operation should be "Addition".

○ **Number Input:**

- Include two text entry boxes for users to enter two numeric values (e.g., num1 and num2).

○ **Calculate Button:**

- Include a button labeled "Calculate" for users to submit the numbers and operation.

3. **Functionality:**

○ **Empty Field Check:**

If the user leaves any input field empty or enters non-numeric values, display a warning message:

"Please enter valid numbers!"

○ **Perform Calculation:**


Based on the selected operation, perform the appropriate mathematical calculation:

- **Addition:** Add the two numbers.
- **Subtraction:** Subtract the second number from the first.
- **Multiplication:** Multiply the two numbers.
- **Division:** Divide the first number by the second (if the second number is not zero).

○ **Error Handling for Division:**

If the user tries to divide by zero, display a message:

"Cannot divide by zero!"

 Mathematical Operation App—□×

Enter first number:

Enter second number:

Select operation:


☒ Addition

☐ Subtraction

☐ Multiplication

☐ Division

Calculate

 Mathematical Operation App—□×

Enter first number:

Enter second number:

Select operation:

Addition

▼

Calculate