Activity 2: Loop-Based Basic Calculator with Operation Selection

Objective

Create a loop-based calculator program that repeatedly performs user-selected arithmetic operations until the user chooses to exit.

Implementation Steps

1. Create a new C# Console Application.
2. Continuously run the program until the user selects the **Exit (=)** option.
3. Prompt the user to input the first number.
    - The input must be a whole number (integer).
4. Prompt the user to input the second number.
    - The input must be a whole number (integer).
5. Prompt the user to choose an operation.
    - Allowed operations are:
        - Addition (+)
        - Subtraction (-)
        - Multiplication (*)
        - Division (/)
        - Modulo (%)
        - Exit (=)
6. Validate the selected operation.
    - If the operation is not valid, display the message:
      "Incorrect Operation Used, please try again"
    - Ask for the operation again without terminating the program.
7. Handle the selected operation:
    - **Exit (=)** → terminate the program loop.
    - **Addition (+), Subtraction (-), Multiplication (*)** → perform operation and display integer result.
    - **Division (/)** →
        - If the second number is zero, return null and display `"Cannot divide by zero"`
        - Otherwise, display the result as a decimal (double).

- **Modulo (%) →**
  - If the second number is zero, return null and display `"Cannot modulo by zero"`
  - Otherwise, display the remainder as an integer.

8. After displaying the result (or the zero-division message), return to Step 3 and allow the user to perform another calculation.