This Python program is a **Graphical User Interface (GUI) calculator** created using the tkinter library. It provides an intuitive and interactive platform for performing basic arithmetic operations such as addition, subtraction, multiplication, and division.

**Overview:**

1. **Objective:**
   * The program functions as a simple calculator, enabling users to input numbers and perform calculations through a graphical interface.
2. **Main Features:**
   * **Arithmetic Operations:** Supports fundamental operations like addition (+), subtraction (-), multiplication (\*), and division (/).
   * **Clear Function:** Includes a "C" button to reset the display, clearing the current input or result.
   * **Result Computation:** Displays the calculated result when the "=" button is pressed.
   * **Error Handling:** Alerts users with an error message for invalid inputs, such as division by zero or incorrect expressions.
3. **User Interface Design:**
   * **Display Area:** A text box at the top acts as the display screen, showing user inputs and the output of calculations.
   * **Button Grid:** Includes buttons for digits (0-9) and operators (+, -, \*, /, =, C) arranged in a layout similar to a physical calculator.
4. **Functionality:**
   * **Dynamic Input:** Each button click appends the corresponding number or operator to the input field.
   * **Expression Evaluation:** When the "=" button is clicked, the eval() function calculates the entered expression and displays the result.
   * **Reset Capability:** The "C" button erases all text in the input field, allowing new calculations.
5. **Usability:**
   * The calculator is designed with simplicity, making it user-friendly and easy to navigate.
   * Its interface mirrors that of a traditional calculator, ensuring familiarity for users.
6. **Error Handling:**
   * Incorporates safeguards to manage invalid operations (e.g., dividing by zero) through a try-except mechanism that shows error messages when needed.

**How It Works:**

1. Users click the on-screen buttons to enter numbers and operations.
2. The input appears in the display box at the top.
3. Clicking "=" evaluates the expression and shows the result.
4. Pressing "C" clears the display for a fresh start.