Calculator . , Explanation

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This Python program provides a calculator with two modes: GUI-based and terminal-based. Users can select their preferred mode at runtime. Here's a breakdown of the code:

1. Terminal Calculator (`terminal_calculator` function):

- A text-based calculator that takes input directly from the terminal.
- Users can enter calculations, and the program evaluates the expression using the `eval()` function.
- The user can exit the calculator by typing 'exit'.

2. GUI Calculator (`gui_calculator` function):

- A graphical user interface calculator built using the Tkinter library.
- Features:
  - Input field: Allows users to enter arithmetic expressions.
  - Buttons: Number buttons (0-9), operation buttons (+, -, *, /), a clear button (C), and an equal button (=) to calculate the result.
  - History button: Displays a history of all calculations performed during the session.
- The calculator evaluates expressions entered by the user and displays the result. If the input is invalid, an error message is shown.

3. Main Functionality:

- The program starts by prompting the user to choose between the GUI calculator and the terminal calculator.
- Based on the user's choice, the appropriate function is called.

Additional Features:

- History: All calculations in the GUI mode are saved in a list and displayed when the user clicks the "History" button.
- Color-coded Buttons: Different buttons have distinct colors for a more user-friendly experience.
- Input Validation: Invalid inputs in both modes are handled gracefully, ensuring the

program does not crash.

This program showcases the versatility of Python in creating both command-line and graphical applications using a single codebase.