

GUI based calculator to perform simple and scientific operations

By

Teaching Assistant

Data Science

Ved Prakash Chaubey



- `import tkinter as tk`
- This line imports the tkinter library, which provides the GUI widgets used in this application.
- `def calculate():`
- `first_number = int(first_number_entry.get())`
- `second_number = int(second_number_entry.get())`
- `operator = operator_entry.get()`
- This is the definition of the **calculate** function, which performs the calculation based on the input provided by the user. The first line retrieves the first number entered by the user, converts it to an integer, and stores it in the **first_number** variable. The second line retrieves the second number entered by the user, converts it to an integer, and stores it in the **second_number** variable. The third line retrieves the operator entered by the user and stores it in the **operator** variable.

These lines perform the calculation based on the operator entered by the user. If the operator is "1", addition is performed and the result is displayed as "Result: [result]". If the operator is "2", subtraction is performed and the result is displayed as "Result: [result]". If the operator is "3", multiplication is performed and the result is displayed as "Result: [result]". If the operator is "4", division is performed and the result is displayed as "Result: [result]".

```
else:  
    result_label.config(text="Invalid operator")
```

This line displays the result as "Invalid operator" if the operator entered by the user is not 1, 2, 3, or 4.

```
# GUI setup root = tk.Tk() root.title("Calculator")
```

These lines create the main window for the GUI and set its title to "Calculator".


```
first_number_label = tk.Label(root, text="First number")  
first_number_label.pack()  
first_number_entry = tk.Entry(root)  
first_number_entry.pack()
```

These lines create a label and an entry widget for the first number. The label is set to display the text "First number", and the entry widget is used for entering the first number. Both the label and the entry widget are created as children of the **root** window and arranged using the **pack** method.

```
second_number_label = tk.Label(root,  
text="Second number")  
second_number_label.pack()  
second_number_entry = tk.Entry(root)  
second_number_entry.pack()
```

These lines create a label and an entry



Thank You

