

## Task 1: Click Counter

Create a window with a label displaying a count (initially 0) and a button. Each time the button is clicked, the count should increase by 1 and the label should update.

### Expected Functionality:

1. The window opens, showing "Count: 0" (or similar) and a button labeled "Click Me" (or similar).
2. Clicking the button changes the label text to "Count: 1".
3. Subsequent clicks increment the count displayed on the label (Count: 2, Count: 3, etc.).

```
import tkinter as tk
```

```
root = tk.Tk()
root.title("Click Counter")
```

```
count = 0
```

```
def increase_count():
    global count
    count += 1
    label.config(text=f"Count: {count}")
```

```
label = tk.Label(root, text="Count: 0", font=("Arial", 16))
label.pack(pady=10)
```

```
button = tk.Button(root, text="Click Me", font=("Arial", 14), command=increase_count)
button.pack(pady=10)
```

```
root.mainloop()
```

Count: 2

Click Me

Task2:

### Task 2: Simple Calculator (+, -, \*, /)

Create a basic calculator that takes two numbers as input and can perform addition, subtraction, multiplication, and division, displaying the result.

#### Expected Functionality:

- The window displays two input fields (Entry widgets) labeled "Number 1" and "Number 2".
- There are buttons for the four basic arithmetic operations (+, -, \*, /).
- There is a label to display the result (e.g., "Result:").
- User enters numbers in the input fields.
- User clicks an operation button.
- The application calculates the result and displays it in the result label.
- If the input is invalid (not a number) or division by zero occurs, an appropriate error message is shown in the result label (e.g., "Error: Invalid Input" or "Error: Cannot divide by zero").

```
# -*- coding: utf-8 -*-  
"""
```

Created on Tue Nov 11 15:29:04 2025

```
@author: Student  
"""
```

```
import tkinter as tk
```

```
root = tk.Tk()  
root.title("Simple Calculator")
```

```

root.geometry("500x500")

def calculate(operation):
    try:
        num1 = int(entry1.get())
        num2 = int(entry2.get())

        if operation == '+':
            result = num1 + num2
        elif operation == '-':
            result = num1 - num2
        elif operation == '*':
            result = num1 * num2
        elif operation == '/':
            if num2 == 0:
                result_label.config(text="Error: Cannot divide by zero")
                return
            result = num1 / num2

        result_label.config(text=f"Result: {result}")
    except ValueError:
        result_label.config(text="Error: Invalid Input")

tk.Label(root, text="Number 1:").pack( padx=5, pady=5)
entry1 = tk.Entry(root)
entry1.pack(padx=5, pady=5)

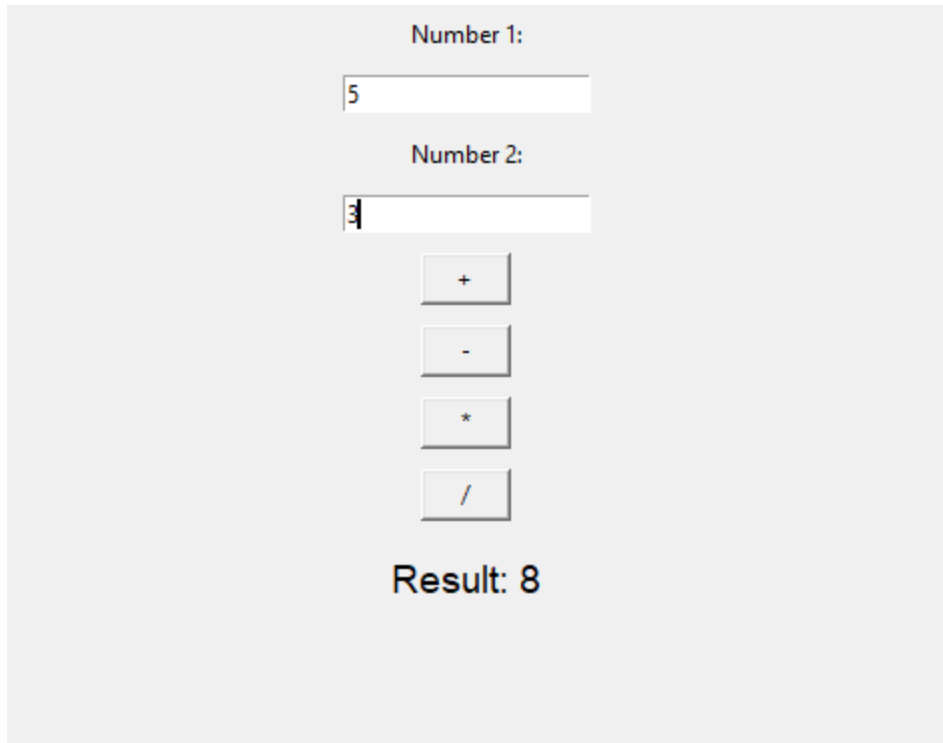
tk.Label(root, text="Number 2:").pack( padx=5, pady=5)
entry2 = tk.Entry(root)
entry2.pack( padx=5, pady=5)

tk.Button(root, text="+", width=5, command=lambda: calculate('+')).pack( padx=5, pady=5)
tk.Button(root, text="-", width=5, command=lambda: calculate('-')).pack( padx=5, pady=5)
tk.Button(root, text="*", width=5, command=lambda: calculate('*')).pack( padx=5, pady=5)
tk.Button(root, text="/", width=5, command=lambda: calculate('/')).pack( padx=5, pady=5)

result_label = tk.Label(root, text="Result:", font=("Arial", 14))
result_label.pack( pady=10)

root.mainloop()

```



Task3:

### Task 3: Simple Text Editor with File Menu

Create a label that changes text color every time the button is clicked

```
# -*- coding: utf-8 -*-  
"""
```

Created on Tue Nov 11 15:29:08 2025

```
@author: Student  
"""
```

```
import tkinter as tk
```

```
a = tk.Tk()  
a.title("Color Changer")
```

```
colors = ["red", "green", "blue", "orange", "purple", "black"]  
index = 0
```

```
def change_color():  
    global index  
    index = (index + 1) % len(colors)  
    label.config(fg=colors[index])
```

```
label = tk.Label(a, text="This is a text", font=("Arial", 18), fg=colors[index])  
label.pack(pady=20)
```

```
button = tk.Button(a, text="Change Color", font=("Arial", 14), command=change_color)  
button.pack(pady=10)
```

```
a.mainloop()
```

