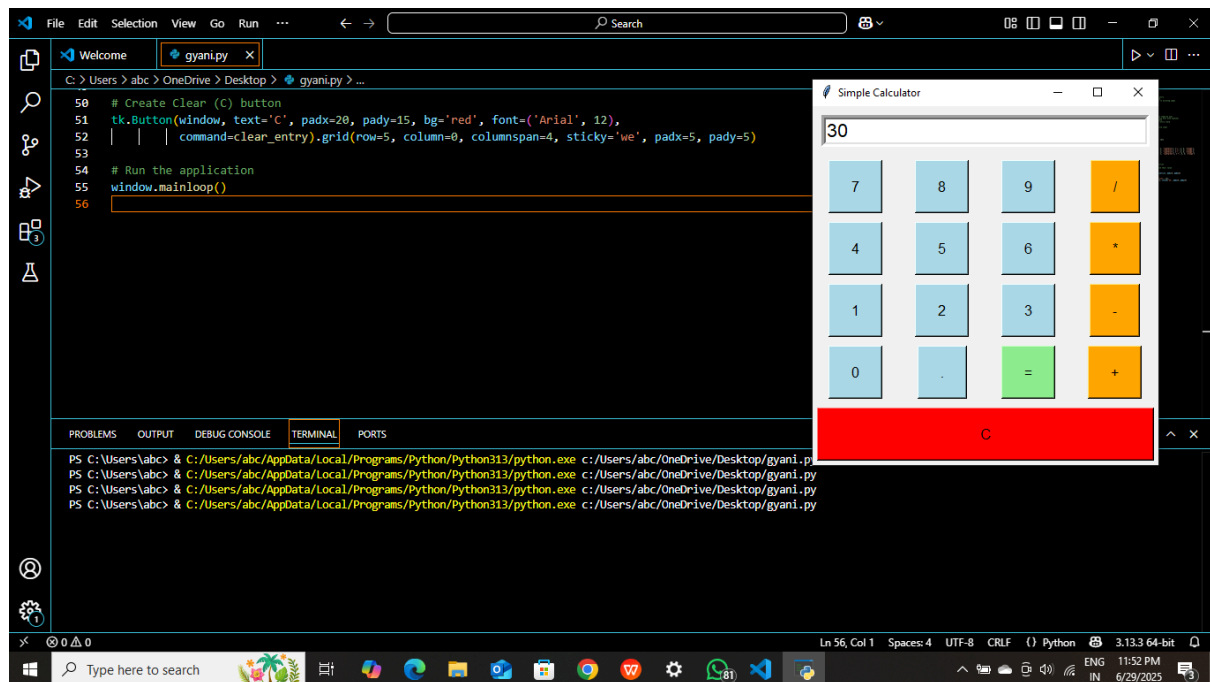


# CALCULATOR...



```
import tkinter as tk # Import tkinter for GUI

# Function called when number or symbol buttons are clicked
def button_click(value):
    current_text = entry.get() # Get current text in entry
    entry.delete(0, tk.END) # Clear the entry field
    entry.insert(0, current_text + value) # Append clicked value to
existing input

# Function to clear the entry field
def clear_entry():
    entry.delete(0, tk.END)

# Function to evaluate and show the result
def calculate_result():
    try:
        expression = entry.get() # Get the expression typed
by user
        result = eval(expression) # Calculate result (use
eval with caution)
        entry.delete(0, tk.END) # Clear the entry field
        entry.insert(0, str(result)) # Insert result into entry
field
    except:
        entry.delete(0, tk.END)
```

```

        entry.insert(0, "Error")                # Show Error if invalid
input

# Create the main window
window = tk.Tk()
window.title("Simple Calculator")

# Entry widget to show input and output
entry = tk.Entry(window, width=30, borderwidth=5, font=('Arial', 16))
entry.grid(row=0, column=0, columnspan=4, padx=10, pady=10)

# List of button labels, grid positions and colors
buttons = [
    ('7', 1, 0, 'lightblue'), ('8', 1, 1, 'lightblue'), ('9', 1, 2,
'lightblue'), ('/', 1, 3, 'orange'),
    ('4', 2, 0, 'lightblue'), ('5', 2, 1, 'lightblue'), ('6', 2, 2,
'lightblue'), ('*', 2, 3, 'orange'),
    ('1', 3, 0, 'lightblue'), ('2', 3, 1, 'lightblue'), ('3', 3, 2,
'lightblue'), ('-', 3, 3, 'orange'),
    ('0', 4, 0, 'lightblue'), ('.', 4, 1, 'lightblue'), ('=', 4, 2,
'lightgreen'), ('+', 4, 3, 'orange')
]

# Loop to create buttons
for (text, row, col, color) in buttons:
    if text == '=':
        cmd = calculate_result # '=' should call the result function
    else:
        cmd = lambda t=text: button_click(t) # other buttons send
their value

    tk.Button(window, text=text, padx=20, pady=15, bg=color,
        font=('Arial', 12), command=cmd).grid(row=row,
column=col, padx=5, pady=5)

# Create Clear (C) button
tk.Button(window, text='C', padx=20, pady=15, bg='red', font=('Arial',
12),
        command=clear_entry).grid(row=5, column=0, columnspan=4,
sticky='we', padx=5, pady=5)

# Run the application
window.mainloop()

```