

Exercise 6

Write a GUI program to implement Simple Calculator.

Code

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from tkinter import *
def button_click(number):
    current = display.get()
    display.delete(0, END)
    display.insert(END, current + str(number))

def button_clear():
    display.delete(0, END)

def button_equal():
    try:
        expression = display.get()
        result = eval(expression)
        display.delete(0, END)
        display.insert(END, result)
    except ZeroDivisionError:
        display.delete(0, END)
        display.insert(END, "Error: Division by zero")

window = Tk()
window.title("Simple Calculator")
window.configure(bg="black")

display = Entry(window, width=20, justify=LEFT, font=("Arial", 15), bd=10)
display.grid(row=0, column=0, columnspan=3, padx=5, pady=10)

button_1 = Button(window, text="1", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(1))
button_2 = Button(window, text="2", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(2))
button_3 = Button(window, text="3", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(3))
button_4 = Button(window, text="4", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(4))
button_5 = Button(window, text="5", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(5))
button_6 = Button(window, text="6", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(6))
button_7 = Button(window, text="7", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(7))
button_8 = Button(window, text="8", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(8))
button_9 = Button(window, text="9", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(9))
button_0 = Button(window, text="0", padx=20, pady=10, bd=5, bg="black", fg="white",
font=("Arial", 14, "bold"), command=lambda: button_click(0))

button_dot = Button(window, text=" . ", padx=20, pady=10, bd=5, bg="black",
fg="white", font=("Arial", 14, "bold"), command=lambda: button_click("."))
button_minus = Button(window, text=" - ", padx=20, pady=10, bd=5, bg="orange",
fg="white", font=("Arial", 14, "bold"), command=lambda: button_click("-"))
button_multiply = Button(window, text=" * ", padx=19, pady=10, bd=5, bg="orange",
fg="white", font=("Arial", 14, "bold"), command=lambda: button_click("*"))
button_divide = Button(window, text=" / ", padx=20, pady=10, bd=5, bg="orange",
fg="white", font=("Arial", 14, "bold"), command=lambda: button_click("/"))
button_plus = Button(window, text="+", padx=22, pady=10, bd=5, bg="orange",
fg="white", font=("Arial", 14, "bold"), command=lambda: button_click("+"))
button_equal = Button(window, text="=", padx=20, pady=10, bd=5, bg="orange",
fg="white", font=("Arial", 14, "bold"), command=button_equal)
button_clear = Button(window, text="C", padx=20, pady=5, bd=5, bg="white",
fg="black", font=("Arial", 14, "bold"), command=button_clear)

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button_1.grid(row=1, column=0)
button_2.grid(row=1, column=1)
button_3.grid(row=1, column=2)
button_minus.grid(row=1, column=3)

button_4.grid(row=2, column=0)
button_5.grid(row=2, column=1)
button_6.grid(row=2, column=2)
button_multiply.grid(row=2, column=3)

button_7.grid(row=3, column=0)
button_8.grid(row=3, column=1)
button_9.grid(row=3, column=2)
button_divide.grid(row=3, column=3)

button_0.grid(row=4, column=0)
button_dot.grid(row=4, column=1)
button_equal.grid(row=4, column=2)
button_plus.grid(row=4, column=3)

button_clear.grid(row=0, column=3, columnspan=3, padx=10)
window.columnconfigure((0, 1, 2, 3), weight=1)

window.mainloop()

```

Output



Date of Submission		Signature of the Faculty	
Remarks			