import serial

import time

import tkinter as tk

from tkinter import messagebox

# Connect to the Arduino via Serial

arduino = serial.Serial(port='COM4', baudrate=9600, timeout=.1) # Update COM3 to your port

def send\_command(command):

"""Send a command to Arduino and display the response."""

arduino.write(bytes(command, 'utf-8'))

time.sleep(0.1)

data = arduino.readline().decode('utf-8').strip()

print(data)

messagebox.showinfo("Arduino Response", data)

# Create a simple button interface using Tkinter

root = tk.Tk()

root.title("Arduino LED Controller")

# LED ON Button

led\_on\_button = tk.Button(root, text="Turn LED ON", command=lambda: send\_command('1'))

led\_on\_button.pack(pady=10)

# LED OFF Button

led\_off\_button = tk.Button(root, text="Turn LED OFF", command=lambda: send\_command('0'))

led\_off\_button.pack(pady=10)

# Start the Tkinter loop

root.mainloop()