>>> %Run wifi.py

Connecting to ESP\_SoilSensor\_1...

Device 'wlan0' successfully activated with 'd454cd84-67e7-4f69-a8ca-1db5d691d390'.

Soil Moisture from 192.168.4.1: Soil Moisture: 45%

Device 'wlan0' successfully disconnected.

Collected data: Soil Moisture: 45%

Connecting to ESP\_SoilSensor\_2...

Device 'wlan0' successfully activated with '1933ff20-9940-46f5-8d7e-a803f41686b8'.

Soil Moisture from 192.168.4.1: Soil Moisture: 2154, Motor Off

Device 'wlan0' successfully disconnected.

Collected data: Soil Moisture: 2154, Motor Off

Waiting for 5 minutes before next cycle...

Connecting to ESP\_SoilSensor\_1...

Device 'wlan0' successfully activated with 'd454cd84-67e7-4f69-a8ca-1db5d691d390'.

Soil Moisture from 192.168.4.1: Soil Moisture: 45%

Device 'wlan0' successfully disconnected.

Collected data: Soil Moisture: 45%

Connecting to ESP\_SoilSensor\_2...

Device 'wlan0' successfully activated with '1933ff20-9940-46f5-8d7e-a803f41686b8'.

Soil Moisture from 192.168.4.1: Soil Moisture: 4095, Motor On

Device 'wlan0' successfully disconnected.

Collected data: Soil Moisture: 4095, Motor On

Waiting for 5 minutes before next cycle...

Connecting to ESP\_SoilSensor\_1...

import os

import time

import requests

ESP\_SENSORS = [

{"ssid": "ESP\_SoilSensor\_1", "ip": "192.168.4.1"},

{"ssid": "ESP\_SoilSensor\_2", "ip": "192.168.4.1"}

]

def connect\_to\_esp(ssid):

print(f"\nConnecting to {ssid}...")

os.system(f"nmcli device wifi connect {ssid} password 12345678")

time.sleep(5)

def get\_soil\_moisture(ip):

url = f"http://{ip}/"

try:

response = requests.get(url, timeout=20)

if response.status\_code == 200:

print(f"Soil Moisture from {ip}: {response.text}")

return response.text

except Exception as e:

print(f"Failed to get data from {ip}: {e}")

while True:

for esp in ESP\_SENSORS:

connect\_to\_esp(esp["ssid"])

moisture = get\_soil\_moisture(esp["ip"])

os.system("nmcli device disconnect wlan0")

print(f"Collected data: {moisture}")

print("Waiting for 5 minutes before next cycle...")

time.sleep(1)