**RaspberryPi code:**

import time

from gpiozero import LED

import paho.mqtt.client as mqtt

from RPLCD import CharLCD

import RPi.GPIO as GPIO

from RPLCD.i2c import CharLCD

from time import sleep

import re

from typing import NamedTuple

from influxdb import InfluxDBClient

# LCD

lcd = CharLCD(i2c\_expander='PCF8574', address=0x27, port=1,

cols=16, rows=2, dotsize=8, #Voor lcd 16x2

charmap='A02',

auto\_linebreaks=True,

backlight\_enabled=True)

# WiFi-gegevens

SSID = "\*\*\*\*\*\*\*\*\*\*\*"

PASSWORD = "\*\*\*\*\*\*\*\*\*\*"

# MQTT-gegevens

mqtt\_server = "192.\*\*\*.\*.\*\*\*"

mqtt\_port = 1883

mqtt\_user = "\*\*\*\*\*\*\*"

mqtt\_password = "\*\*\*\*\*\*"

client\_id = "\*\*\*\*\*\*\*"

topic = "esp32/#"

topic1 = "esp32/kamer1/temp"

topic2 = "esp32/kamer2/temp"

# LED

A1 = LED(17)

V1 = LED(27)

A2 = LED(23)

V2 = LED(24)

# Callback-functie voor het ontvangen van berichten

def on\_message(client, userdata, message):

topic = message.topic

lcd.clear

if topic == topic1:

lcd.cursor\_pos = (0, 0)

lcd.write\_string("Temp1: {}C".format(message.payload.decode()))

elif topic == topic2:

lcd.cursor\_pos = (1, 0)

lcd.write\_string("Temp2: {}C".format(message.payload.decode()))

if message.payload.decode() == "airco1-AAN":

print("A1".format(message.payload.decode()))

A1.on()

V1.off()

if message.payload.decode() == "verwarming1-AAN":

print("V1")

V1.on()

A1.off()

if message.payload.decode() == "airco2-AAN":

print("A2".format(message.payload.decode()))

A2.on()

V2.off()

if message.payload.decode() == "verwarming2-AAN":

print("V2")

V2.on()

A2.off()

# Verbinding maken met MQTT-broker

client = mqtt.Client(client\_id)

client.on\_message = on\_message

client.username\_pw\_set(mqtt\_user, mqtt\_password)

client.connect(mqtt\_server, mqtt\_port)

# Abonneren op het opgegeven topic

client.subscribe(topic1)

client.subscribe(topic2)

client.subscribe(topic)

# Loop voor het luisteren naar berichten

client.loop\_forever()