# Install the MQTT Publisher

# sudo pip3 install paho-mqtt

# open the MQTT browser client in web browser

# http://www.hivemq.com/demos/websocket-client/

import os

import sys

import time

import board

import adafruit\_dht

import paho.mqtt.client as mqtt

import json

# Initial the dht device, with data pin connected to:

dhtDevice = adafruit\_dht.DHT11(board.D19, use\_pulseio=False)

sensor\_data = {'temperature': 0, 'humidity': 0}

MQTTServer = 'broker.mqttdashboard.com'

client = mqtt.Client()

client.connect(MQTTServer, 1883, 8000)

client.loop\_start()

if \_name\_ == '\_main\_':

while True:

try:

# Print the values to the serial port

temperature = dhtDevice.temperature

humidity = dhtDevice.humidity

print("Temp: {:.1f} C Humidity: {}% ".format( temperature, humidity))

time.sleep(2.0)

sensor\_data['temperature'] = temperature

sensor\_data['humidity'] = humidity

# Sending humidity and temperature data to HIVEMQ

client.publish('RPI4\_MQTT', json.dumps(sensor\_data), 1)

time.sleep(5)

except RuntimeError as error:

# Errors happen fairly often, DHT's are hard to read, just keep going

print(error.args[0])

time.sleep(2.0)

continue

except KeyboardInterrupt:

client.loop\_stop()

client.disconnect()

print ('Exiting Program')

exit()