DEVELOP A PYTHON SCRIPT

Date	03 November
Team ID	PNT2022TMID52636
Project Name	Signs with Smart Connectivity for Better Road Safety
Maximum Marks	4 Marks

```python
import requests

import paho.mqtt.client as mqtt

import time

import random

import json


a =
"https://api.openweathermap.org/data/2.5/weather?q=Chennai,IN&appid=edc64d6a64cdea76
f74ae48da4cea3e6"

r = requests.get(url = a)

data = r.json()


x = data["weather"][0]["main"]

y = data["visibility"]

rawdata = {

    "Weather" : x,

    "Visibility" : y

    }


jsondata = json.dumps(rawdata)


print("Weather is: ", x)

print("Visibility is: ", y)
```

```python
ORG = "4i2rfo"
DEVICE_TYPE = "Weather_Analyser"
TOKEN = "12345678"
DEVICE_ID = "OpenWeather"


server = ORG + ".messaging.internetofthings.ibmcloud.com";
pubTopic1 = "iot-2/evt/Weather/fmt/json";
authMethod = "use-token-auth";
token = TOKEN;
clientId = "d:" + ORG + ":" + DEVICE_TYPE + ":" + DEVICE_ID;


mqttc = mqtt.Client(client_id=clientId)
mqttc.username_pw_set(authMethod, token)
mqttc.connect(server, 1883, 60)


while True:
  try:
    mqttc.publish(pubTopic1, jsondata)
    print ("Published")

  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 Exception as error:
    dhtDevice.exit()
    raise error
```

```
    time.sleep(3600.0)


mqttc.loop_forever()
```

| | | OpenWeather | ● Connected | Weather_Analyser | Device | Nov 19, 2022 2:10 PM |

| Identity | Device Information | Recent Events | State | Logs |

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
Visibility	5000	json	a few seconds ago
Weather	{"type":"Buffer","data":[72,97,122,101]}	json	a few seconds ago
Visibility	5000	json	a few seconds ago
Weather	{"type":"Buffer","data":[72,97,122,101]}	json	a few seconds ago
Visibility	5000	json	a few seconds ago