

SOURCE CODE

```
import requests

a="https://api.openweathermap.org/data/2.5/weather?q=Chennai,IN&appid=1628081571520a0fe87e778a934c53c4"

r=requests.get(url=a)

print (r)

data=r.json()

tem=data['main']['temp']

hum=data['main']['humidity']

print ("temperature is :",tem)

print ("humidity is :",hum)

import paho.mqtt.client as paho

import time

import random

def on_publish(client,userdata,mid):

print ("published")

client=paho.Client()

client.on_publish=on_publish

client.connect("broker.mqttdashboard.com",1883)

client.loop_start()

while True:
```

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    tem=random.randint(1,100)

    (rc,mid)=client.publish('ibm1',str(tem),qos=1)

    print (tem)

    time.sleep(10)

import paho.mqtt.client as paho

def on_subscribe(client,userdata,mid,granted_qos):

    print ("subscribed:" +str(mid)+""+str(granted_qos))

def on_message(client,userdata,msg):

    print(msg.topic+" "+str(msg.qos)+" "+str(msg.payload))

client=paho.Client()

client.on_subscribe=on_subscribe

client.on_message=on_message

client.connect("broker.mqttdashboard.com",1883)

client.subscribe('ibm1',qos=1)

client.loop_forever()

#include "DHTesp.h"

const int DHT_PIN=15;

DHTesp dhtsensor;

void setup() {

    // put your setup code here, to run once:

    Serial.begin(115200);

```

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dhtsensor.setup(DHT_PIN,DHTesp::DHT22);

}

void loop() {

    // put your main code here, to run repeatedly:

    TempAndHumidity data=dhtsensor.getTempAndHumidity();

    Serial.println("temperature:"+String(data.temperature,2)+"C") ;

    Serial.println("humidity:"+String(data.humidity,1)+"C") ;

    delay(10); // this speeds up the simulation

}
```