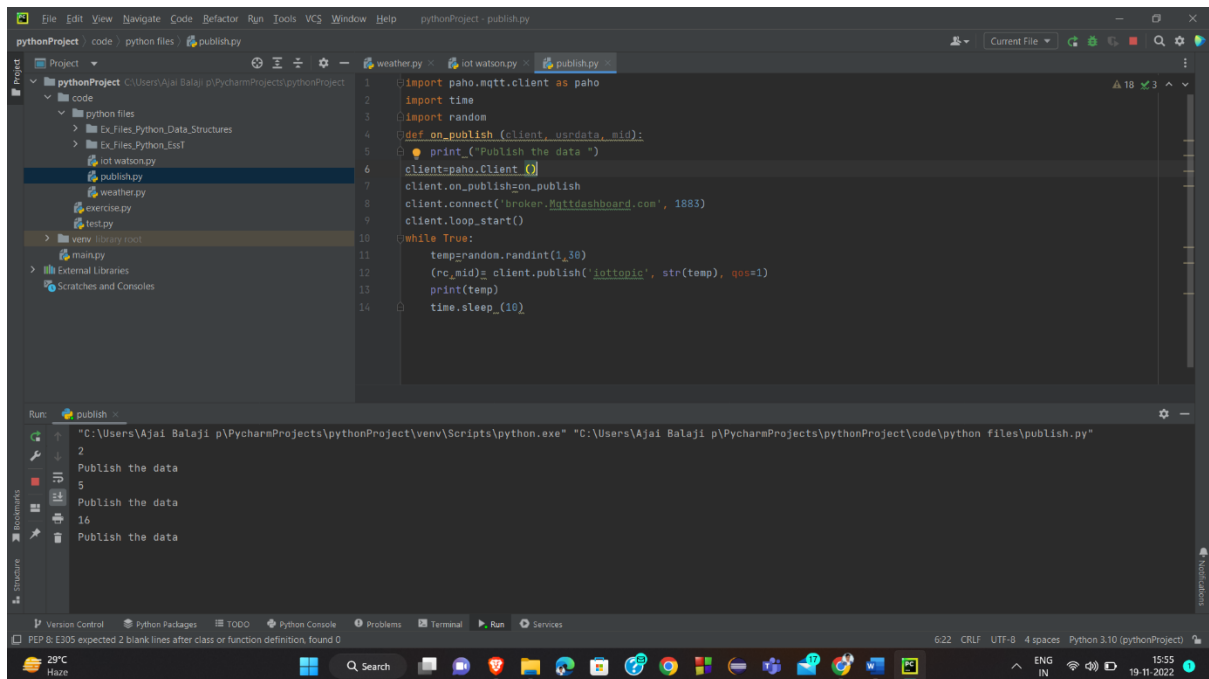


PUBLISH DATA TO IBM CLOUD

Date: 20 OCTOBER 2022

Team ID: PNT2022TMID14814

Project Name: Signs with Smart Connectivity for Better Road Safety



```
1 import paho.mqtt.client as paho
2 import time
3 import random
4 def on_publish(client, userdata, mid):
5     print("Publish the data ")
6     client=paho.Client()
7     client.on_publish=on_publish
8     client.connect('broker.hivemq.com', 1883)
9     client.loop_start()
10 while True:
11     temp=random.randint(1,30)
12     (rc,mid)= client.publish(' iottopic', str(temp), qos=1)
13     print(temp)
14     time.sleep(10)
```

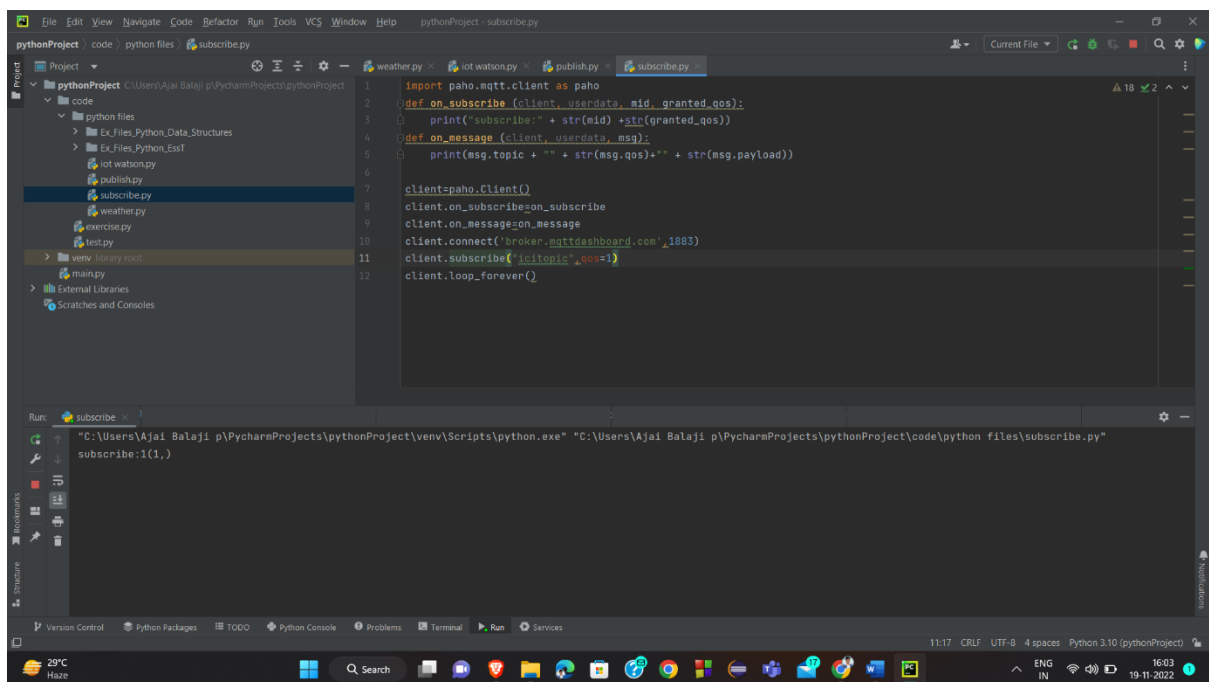
Run: publish.py

"C:\Users\Ajai Balaji p\PycharmProjects\pythonProject\venv\Scripts\python.exe" "C:\Users\Ajai Balaji p\PycharmProjects\pythonProject\code\python_files\publish.py"

2 Publish the data

5 Publish the data

16 Publish the data

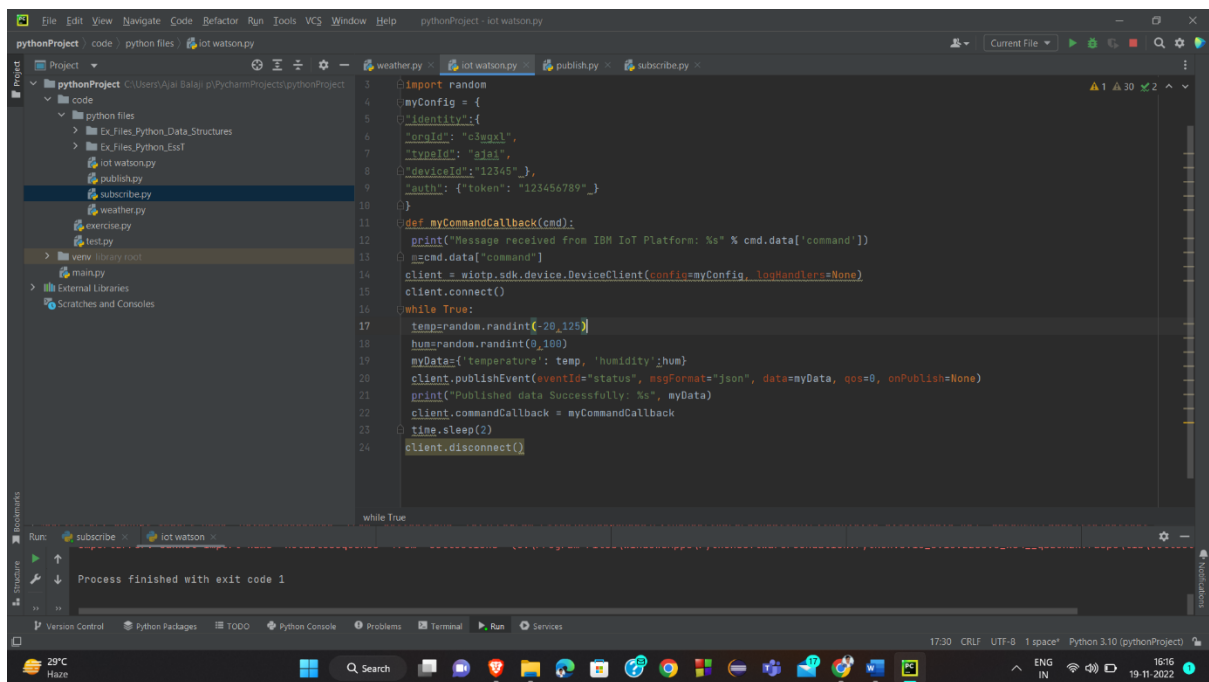
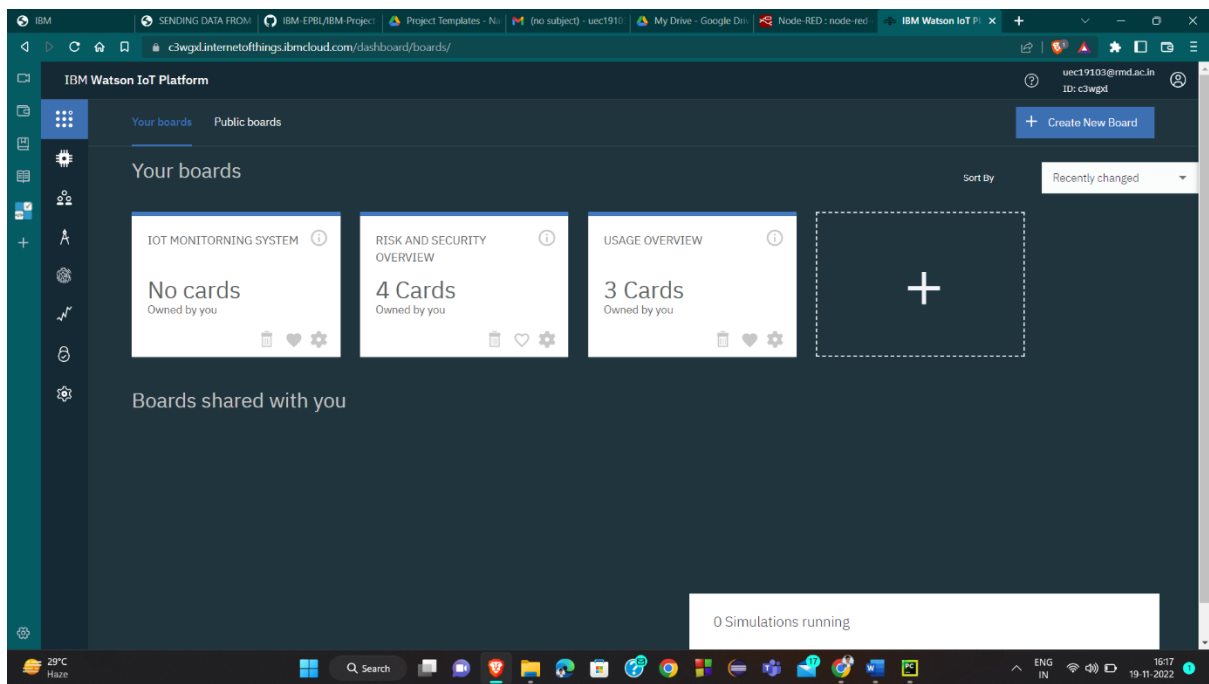


```
1 import paho.mqtt.client as paho
2 def on_subscribe(client, userdata, mid, granted_qos):
3     print("subscribe:" + str(mid) + str(granted_qos))
4 def on_message(client, userdata, msg):
5     print(msg.topic + " " + str(msg.qos) + " " + str(msg.payload))
6
7 client=paho.Client()
8 client.on_subscribe=on_subscribe
9 client.on_message=on_message
10 client.connect('broker.hivemq.com',1883)
11 client.subscribe(' iottopic',qos=1)
12 client.loop_forever()
```

Run: subscribe.py

"C:\Users\Ajai Balaji p\PycharmProjects\pythonProject\venv\Scripts\python.exe" "C:\Users\Ajai Balaji p\PycharmProjects\pythonProject\code\python_files\subscribe.py"

subscribe:1(1,)



Code:

import wiotpsdk.device

import time

import random

myConfig = {

```

"identity":{
"orgId": "c3wgxl",
"typeId": "ajai",
"deviceId":"12345" },
"auth": {"token": "123456789" }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data["command"]

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'temperature': temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData,
qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()

```