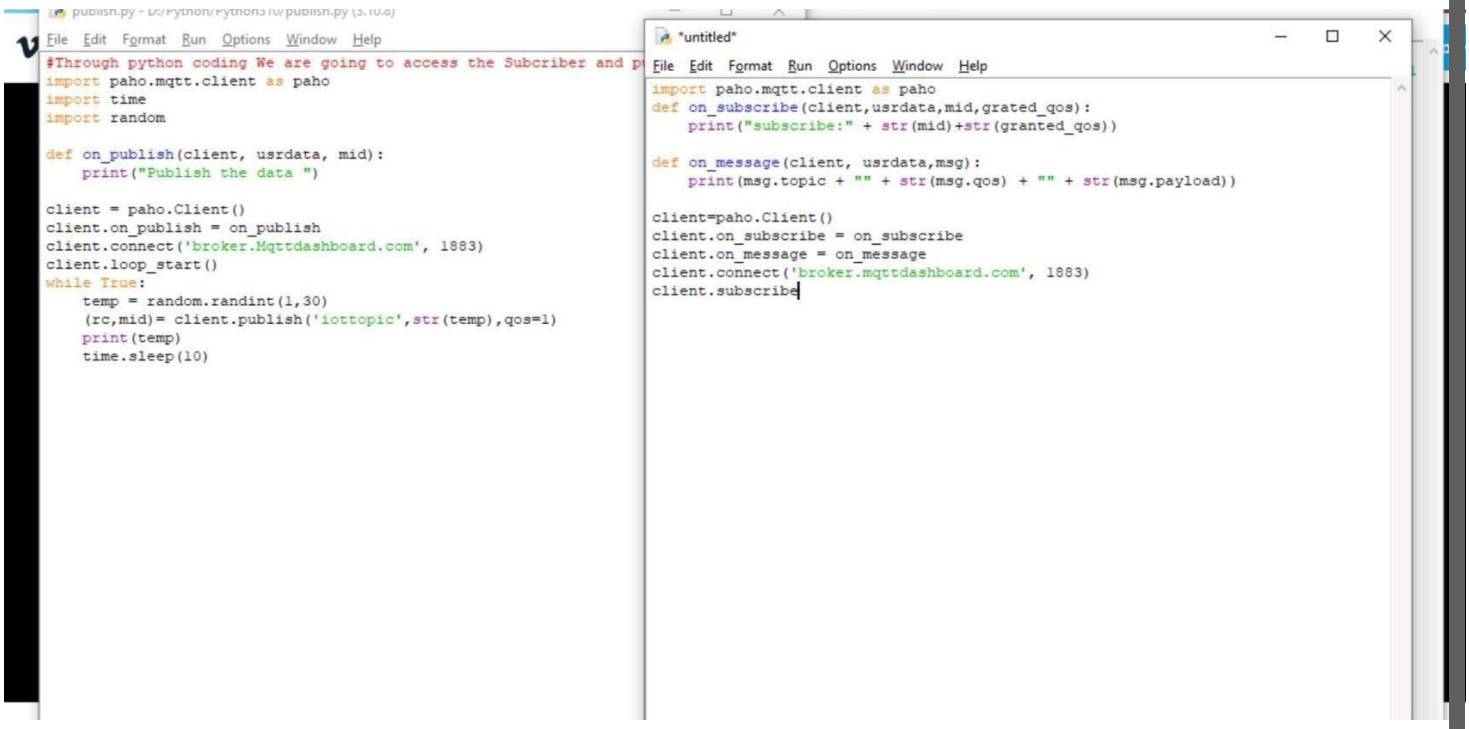
DEVELOP THE PYTHON SCRIPT

Publish data to the IBM Cloud

Team ID : PNT2022TMID22778

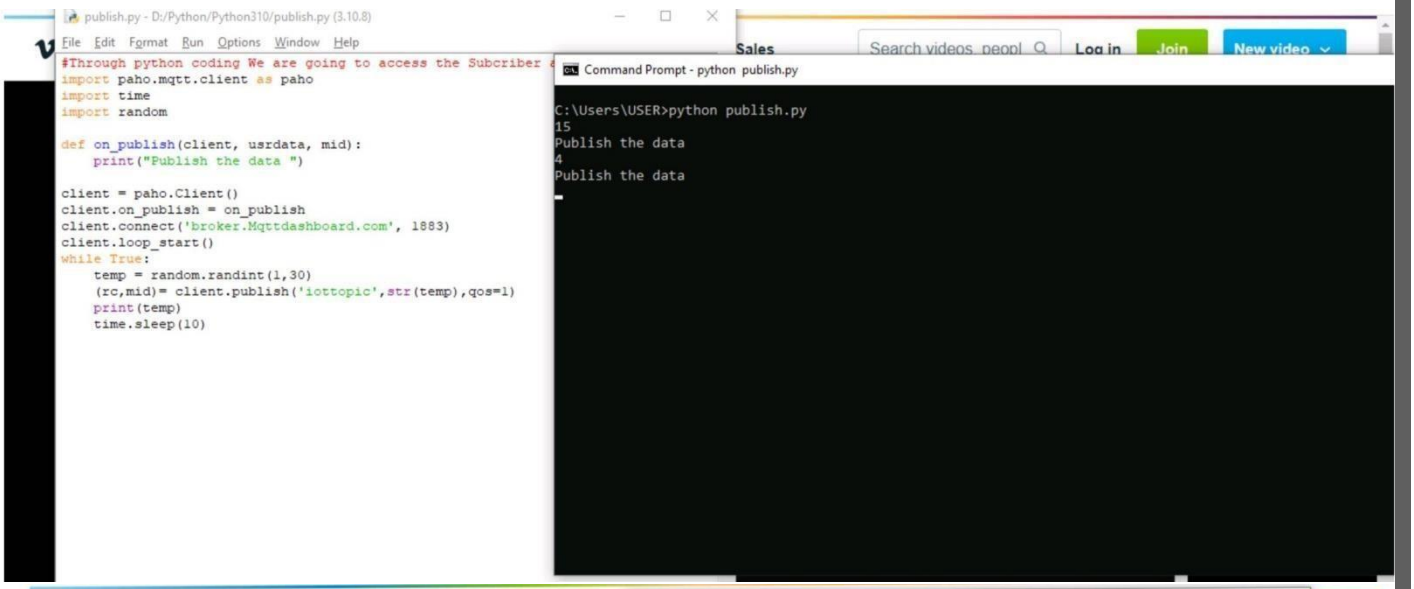
Project Title : SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

TO Make a publisher and subscriber in the process of python and IBM cloud



```
File Edit Format Run Options Window Help
#Through python coding We are going to access the Subcriber and p
import paho.mqtt.client as paho
import time
import random

def on_publish(client, usrdata, mid):
    print("Publish the data ")

client = paho.Client()
client.on_publish = on_publish
client.connect('broker.Mqttdashboard.com', 1883)
client.loop_start()
while True:
    temp = random.randint(1,30)
    (rc,mid)= client.publish('iottopic',str(temp),qos=1)
    print(temp)
    time.sleep(10)
```

```
*untitled*
File Edit Format Run Options Window Help
import paho.mqtt.client as paho
def on_subscribe(client,usrdata,mid,grated_qos):
    print("subscribe:" + str(mid)+str(granted_qos))

def on_message(client, usrdata,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
```


publish.py - D:/Python/Python310/publish.py (3.10.8)
File Edit Format Run Options Window Help
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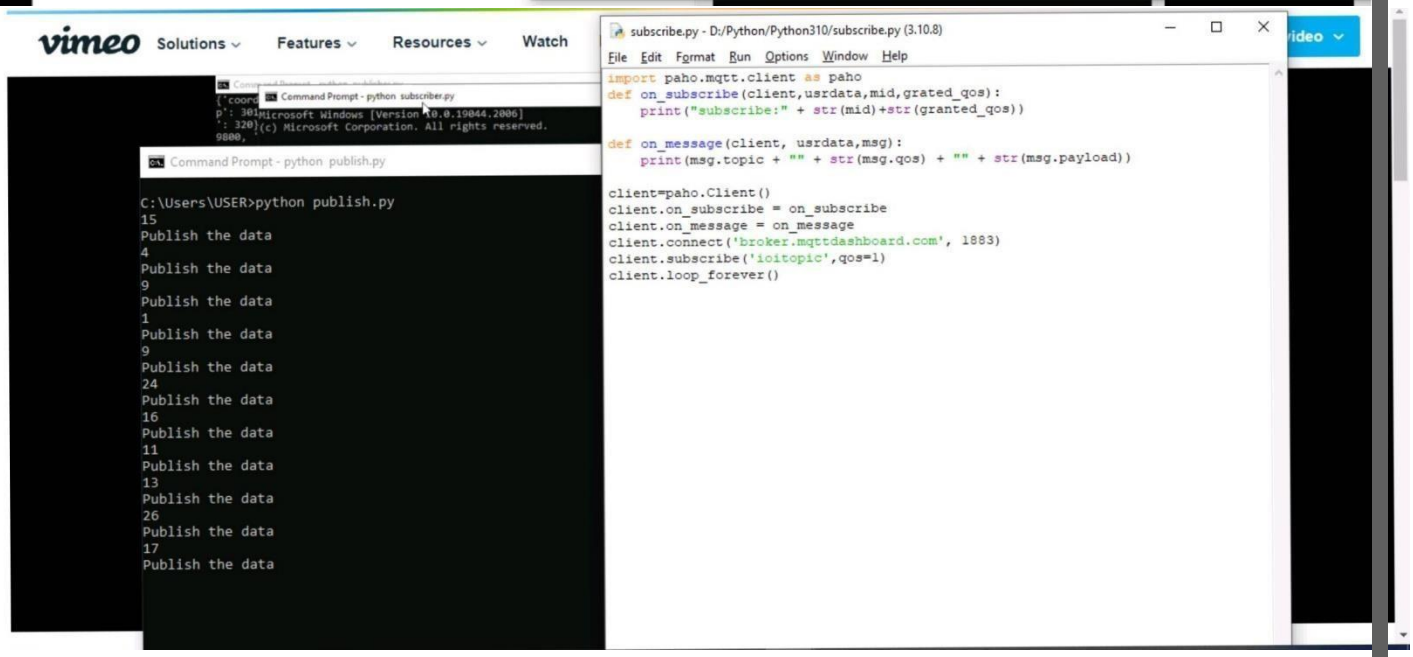
Command Prompt - python publish.py
C:\Users\USER>python publish.py
15
Publish the data
4
Publish the data


vimeo Solutions Features Resources Watch
Command Prompt - python subscriber.py
Microsoft Windows [Version 10.0.19044.2006]
(c) Microsoft Corporation. All rights reserved.
Command Prompt - python publish.py
C:\Users\USER>python publish.py
15
Publish the data
4
Publish the data
9
Publish the data
1
Publish the data
9
Publish the data
24
Publish the data
16
Publish the data
11
Publish the data
13
Publish the data
26
Publish the data
17
Publish the data
subscribe.py - D:/Python/Python310/subscribe.py (3.10.8)
File Edit Format Run Options Window Help
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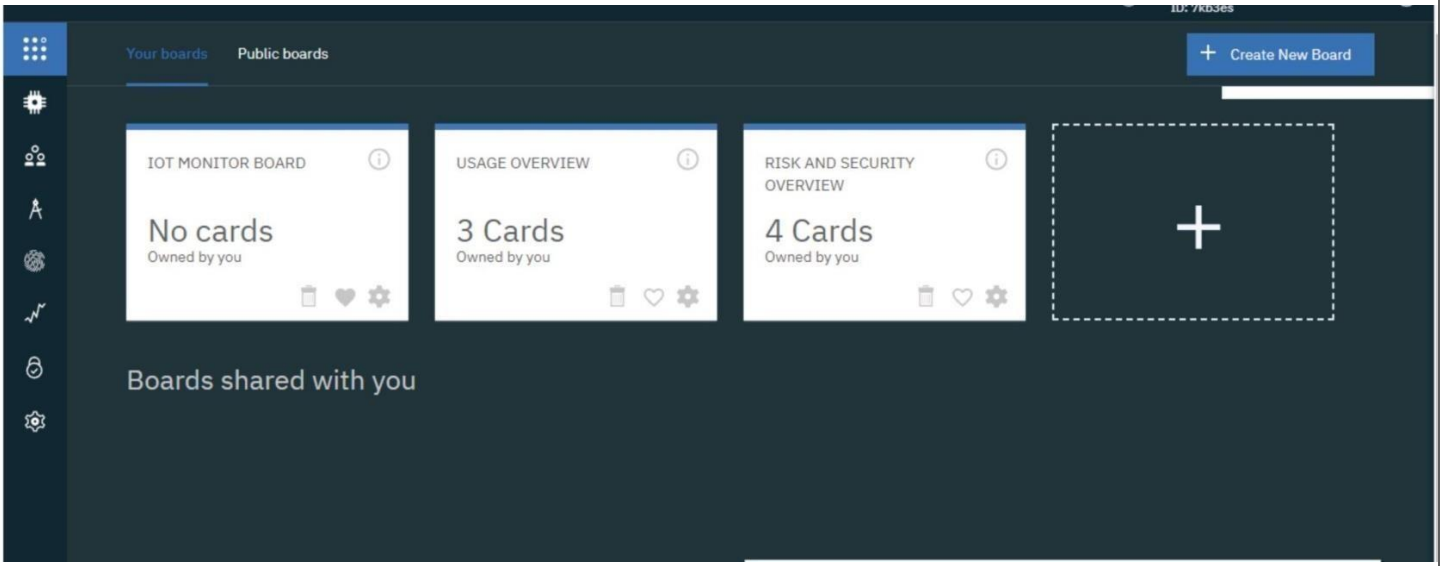
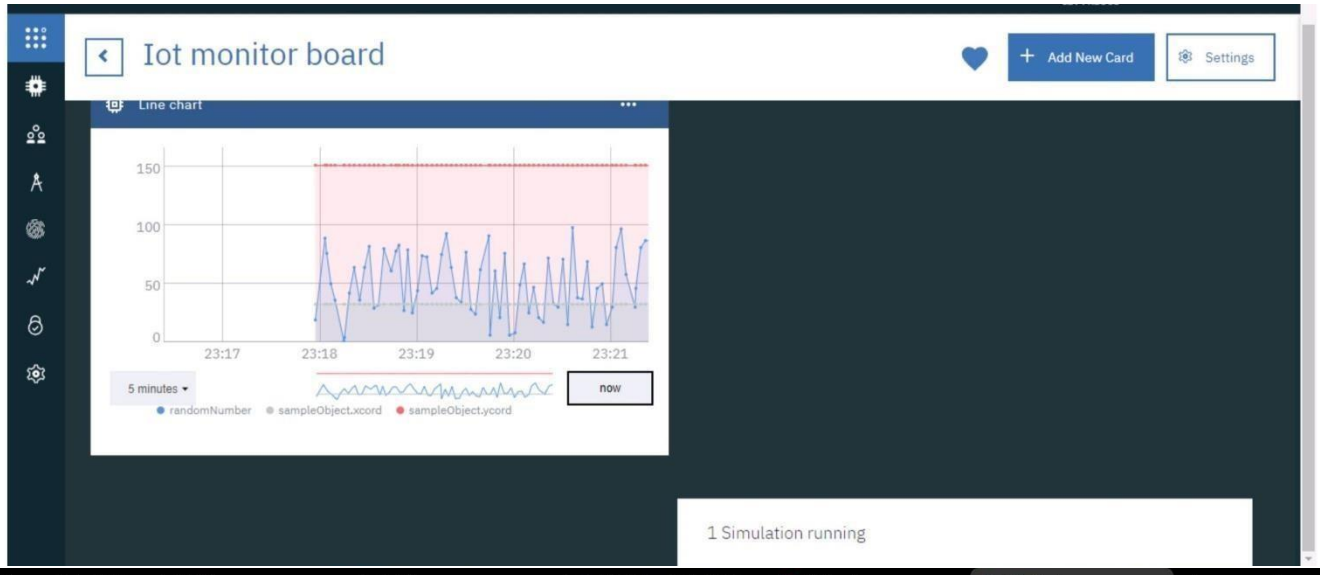
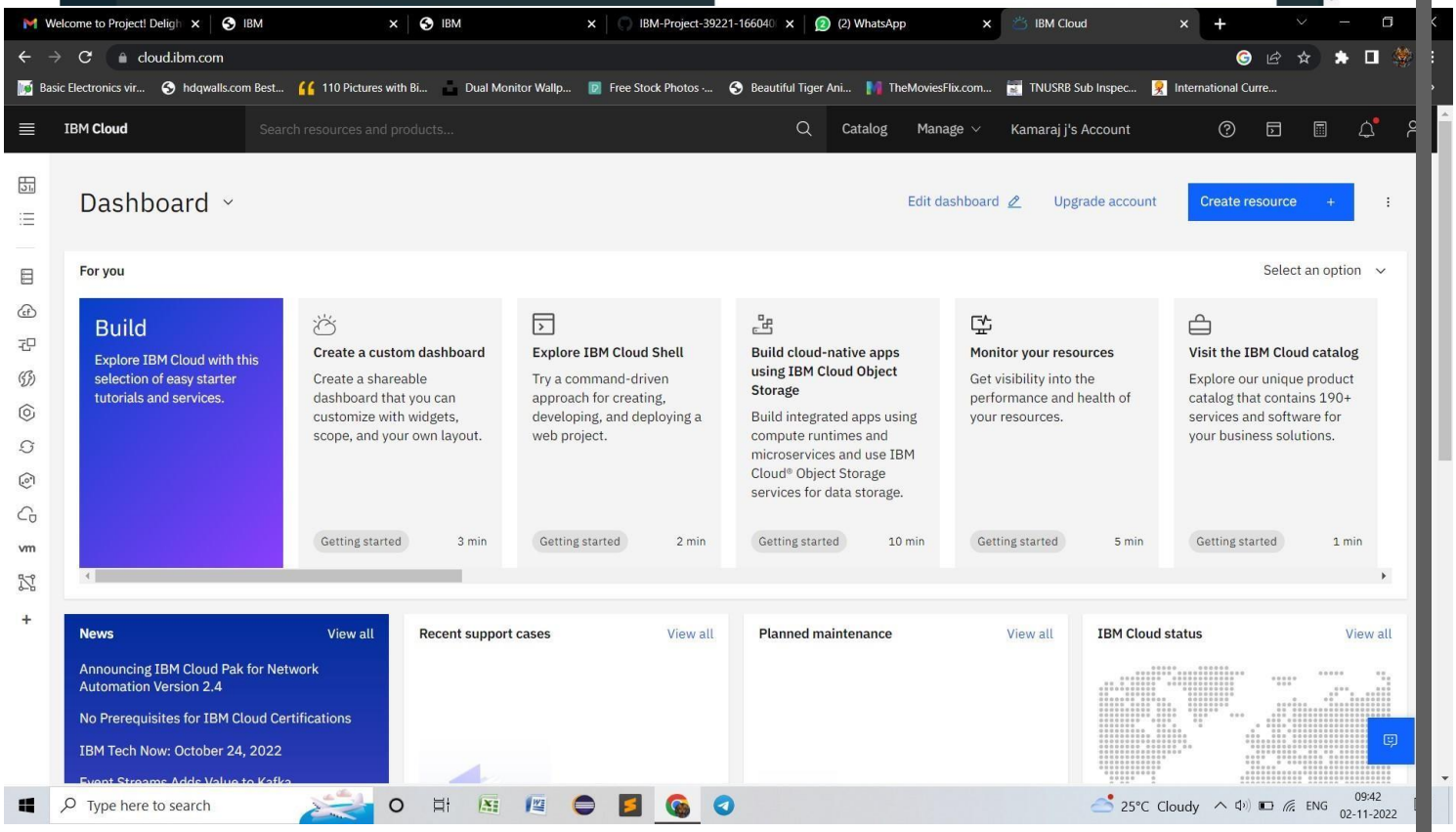
print("subscribe:" + str(mid)+str(granted_qos))
def on_message(client, usrdata,msg):
print(msg.topic + "" + str(msg.qos) + "" + str(msg.payload))
client=paho.Client()
client.on_subscribe = on_subscribe
client.on_message = on_message
client.connect('broker.mqttdashboard.com', 1883)
client.subscribe('ioitopic',qos=1)
client.loop_forever()


Your boards
Public boards
Create New Board
IOT MONITOR BOARD
No cards
Owned by you
USAGE OVERVIEW
3 Cards
Owned by you
RISK AND SECURITY OVERVIEW
4 Cards
Owned by you
Boards shared with you





PROGRAM

```
#IBM
Watson
IOT
Platform
```

```
#pip  install  wiotp-sdk
import wiotp.sdk.device
import    time    import
random myConfig = {
    "identity": {
        "orgId": "hj5fmy",
        "typeId": "NodeMCU",
        "deviceId":"12345"
    },
    "auth": {
        "token": "12345678"
    }
}
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()
```