DEVELOP THE PYTHON SCRIPT
Publish data to the IBM Cloud

Team ID	PNT2022TMID03059
Project Name	Signs with smart connectivity for better road safety

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

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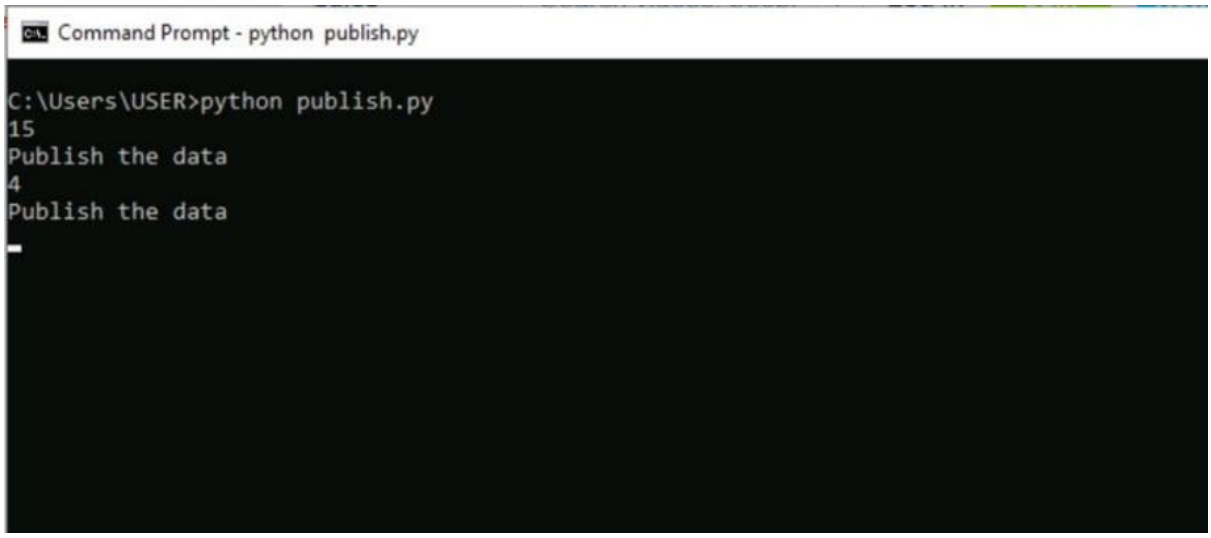
```
import paho.mqtt.client as paho
import time
import random

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)
```

Output:



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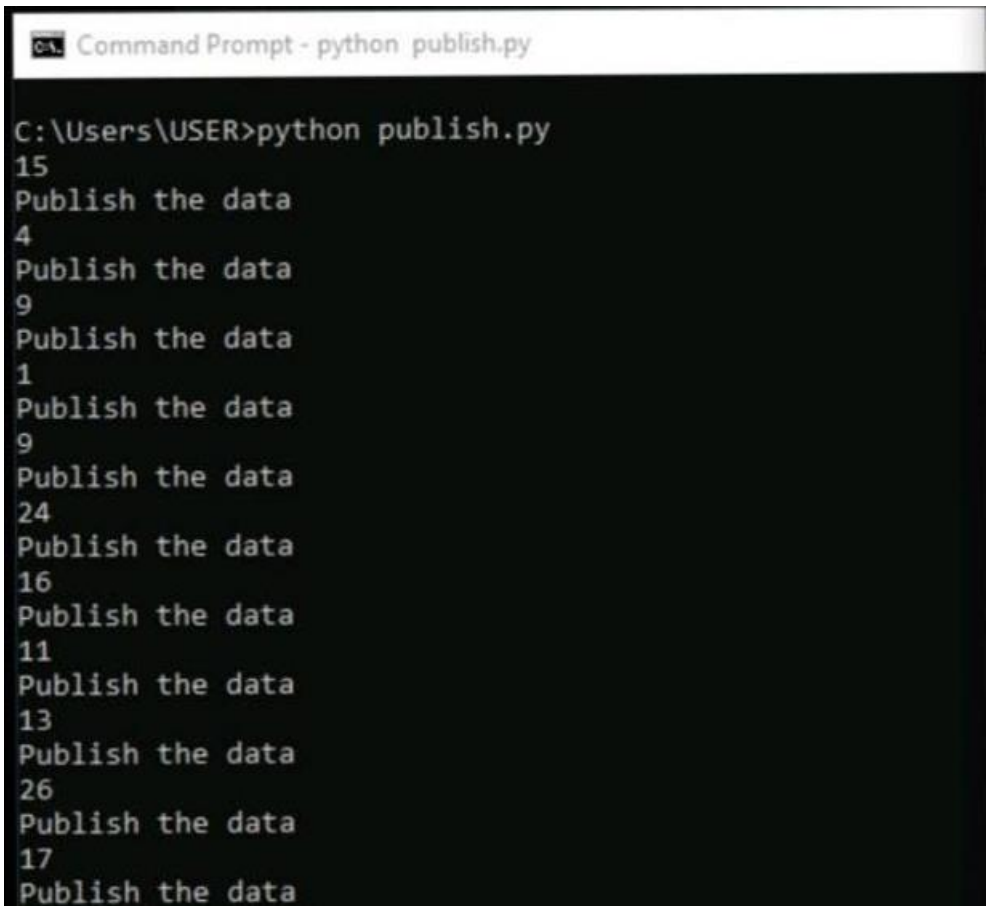
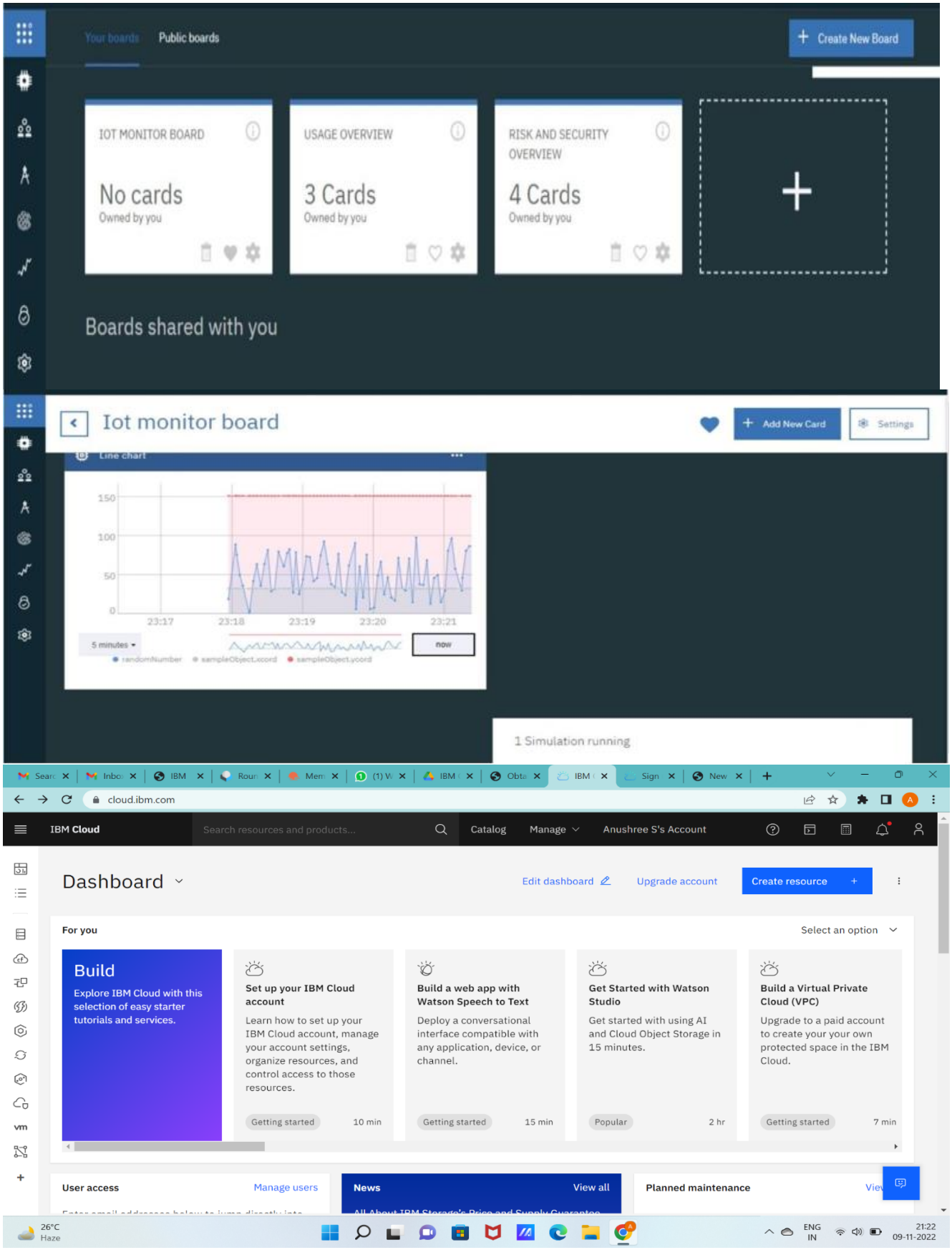
```
import paho.mqtt.client as paho
def on_subscribe(client,usrdata,mid,grated_qos):
    print("subscribe:" + str(mid) +str(granted_qos))

def on_message(client, usrdata,msg):
    print(msg.topic + "" + str(msg.qos) + str(msg.payload))

client=paho.Client()
client.on_subscribe = on_subscribe
client.connect('broker.mqttdashboard.com', 1883)
client.subscribe('iottopic',qos=1)
client.loop_forever()
```

Output:




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
Iot monitor board
Add New Card
Settings
Line chart
150
100
50
0
23:17
23:18
23:19
23:20
23:21
5 minutes
now
1 Simulation running
cloud.ibm.com
IBM Cloud
Search resources and products...
Catalog
Manage
Anushree S's Account
Dashboard
Edit dashboard
Upgrade account
Create resource
For you
Select an option
Build
Explore IBM Cloud with this selection of easy starter tutorials and services.
Set up your IBM Cloud account
Learn how to set up your IBM Cloud account, manage your account settings, organize resources, and control access to those resources.
Getting started
10 min
Build a web app with Watson Speech to Text
Deploy a conversational interface compatible with any application, device, or channel.
Getting started
15 min
Get Started with Watson Studio
Get started with using AI and Cloud Object Storage in 15 minutes.
Popular
2 hr
Build a Virtual Private Cloud (VPC)
Upgrade to a paid account to create your own protected space in the IBM Cloud.
Getting started
7 min
User access
Manage users
News
View all
Planned maintenance
26°C
Haze
ENG
IN
21:22
09-11-2022

PROGRAM:

```
#IBM
Wats
on
IOT
Platform

        #pip install wiotp-sdk
        import
        wiotp.sdk.device
        import time
        import random
        myConfig = {
           "identity": {
              "orgId":
              "hj5fmy",
         "typeId": "NodeMCU",
              "deviceId":"1234
              5"
           },
           "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.Devic
        eClient(config=myConfi
        g, logHandlers=None)
client.connect()
```

```
while True:
temp=random.randint(-20,125)

hum=random.randint(0,100)

myData={'temperature':temp,
'humidity':hum}
client.publishEvent(eventId="stat
us", msgFormat="json",
data=myData, qos=0,
onPublish=None)
print("Published data
Successfully: %s", myData)
client.commandCallback =
myCommandCallback
time.sleep(2)

client.disconnect()
```