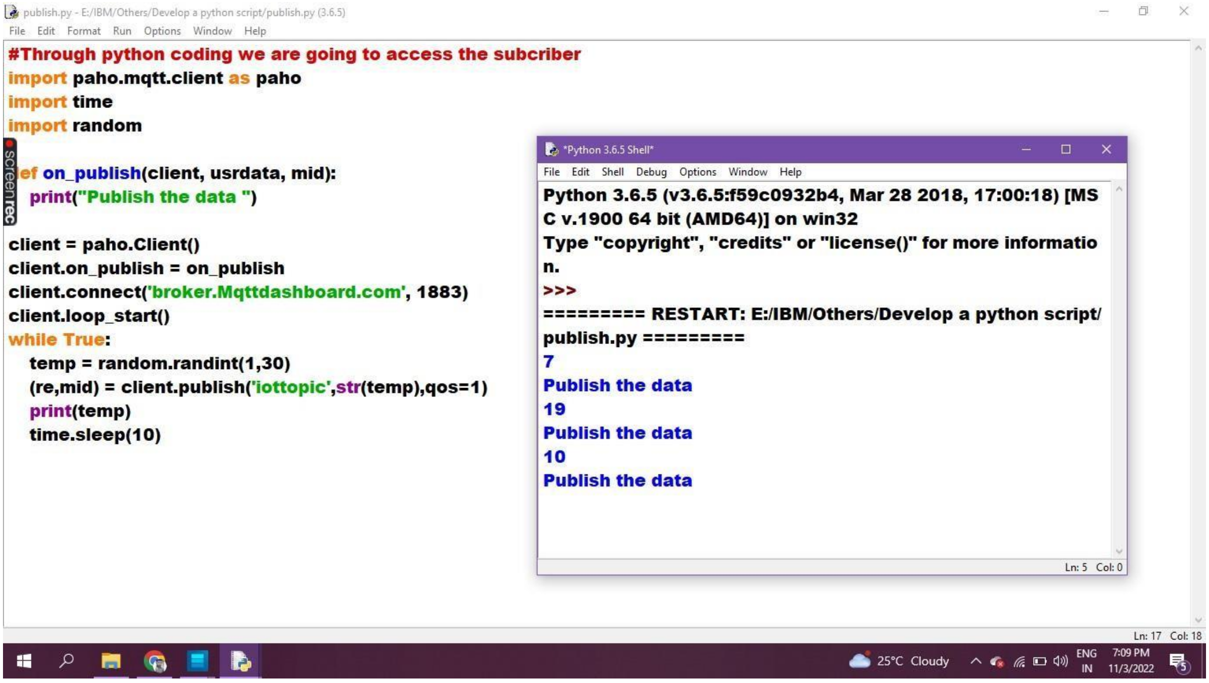
Develop a python script
Publish Data to the IBM Cloud

Date	13 November 2022
Team ID	PNT2022TMID07843
Project Name	Project - Signs with smart connectivity for Better road safety
Maximum Marks	4 Marks

Signs with smart connectivity for Better road safety


publish.py - E:/IBM/Others/Develop a python script/publish.py (3.6.5)
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Python 3.6.5 Shell
File Edit Shell Debug Options Window Help
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```
#Through python coding we are going to access the subcriber
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)
   (re,mid) = client.publish('iottopic',str(temp),qos=1)
   print(temp)
   time.sleep(10)
```

```
Python 3.6.5 (v3.6.5:f59c0932b4, Mar 28 2018, 17:00:18) [MS
C v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more informatio
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publish.py =========
7
Publish the data
19
Publish the data
10
Publish the data
```

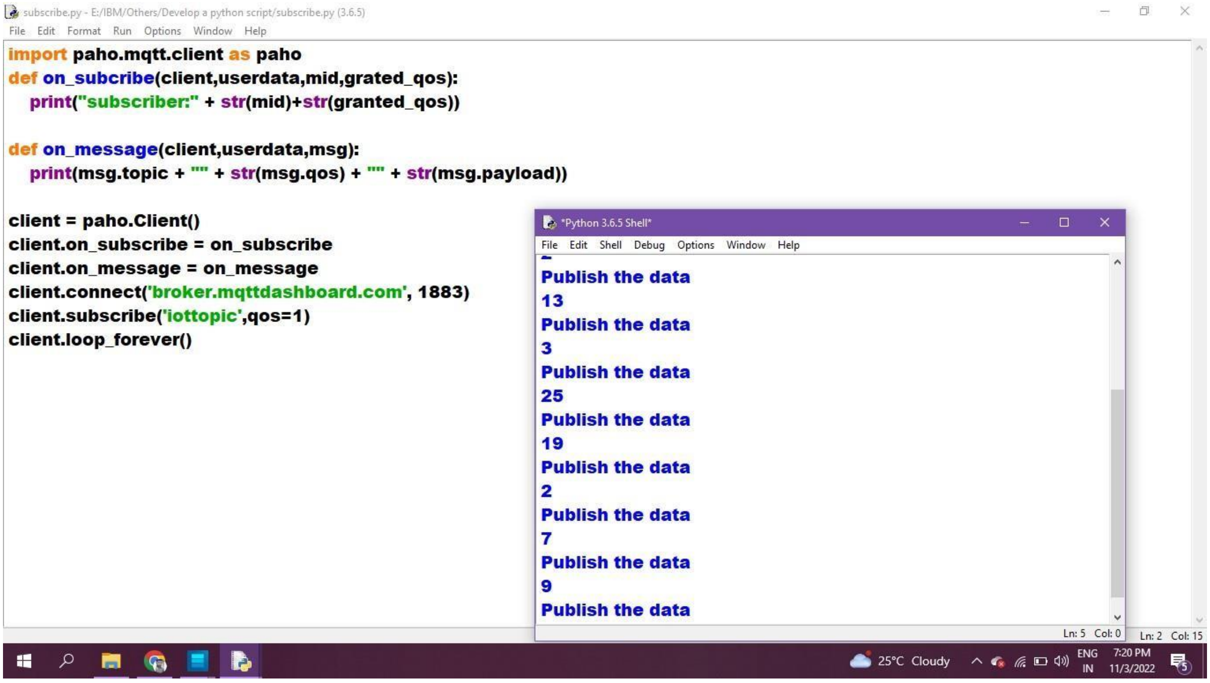
subscribe.py - E:/IBM/Others/Develop a python script/subscribe.py (3.6.5)
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Python 3.6.5 Shell
File Edit Shell Debug Options Window Help
Ln: 5 Col: 0
Ln: 2 Col: 15
25°C Cloudy
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```
import paho.mqtt.client as paho
def on_subcribe(client,userdata,mid,grated_qos):
   print("subscriber:" + 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('iottopic',qos=1)
client.loop_forever()
```

```
Publish the data
13
Publish the data
3
Publish the data
25
Publish the data
19
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2
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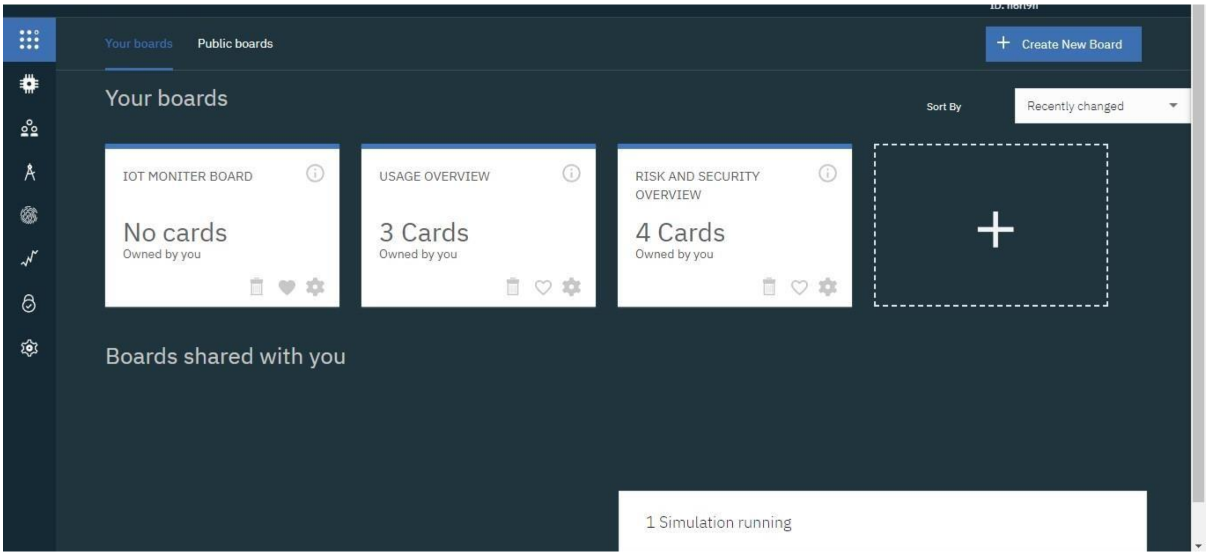


Your boards

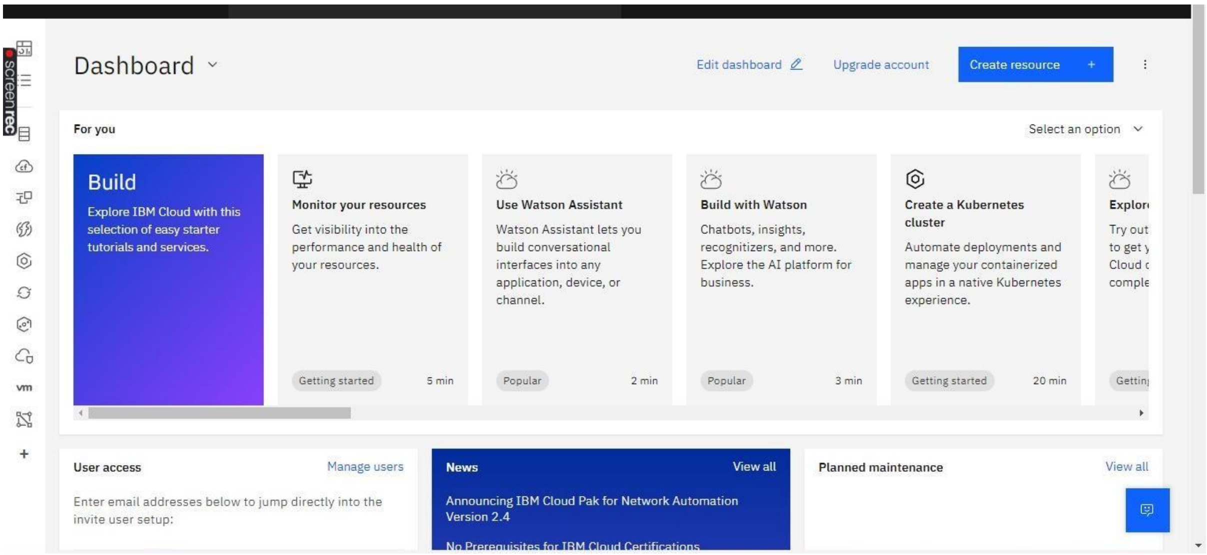
IOT MONITER BOARD
No cards
Owned by you

USAGE OVERVIEW
3 Cards
Owned by you

RISK AND SECURITY OVERVIEW
4 Cards
Owned by you

Boards shared with you

1 Simulation running



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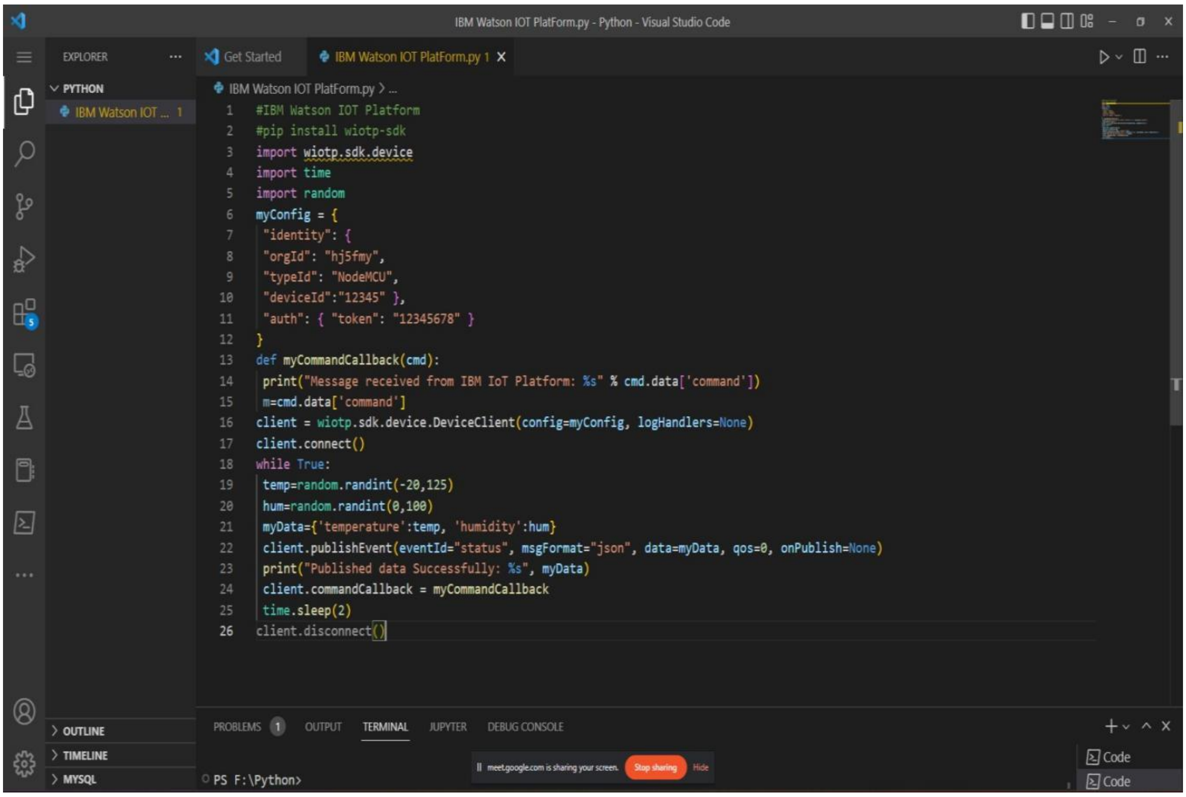
IBM Watson IOT PlatForm.py - Python - Visual Studio Code
EXPLORER
PYTHON
IBM Watson IOT ... 1
Get Started
IBM Watson IOT PlatForm.py 1
IBM Watson IOT PlatForm.py > ...
OUTLINE
TIMELINE
MYSQL
PROBLEMS 1
OUTPUT
TERMINAL
JUPYTER
DEBUG CONSOLE
meet.google.com is sharing your screen.
Stop sharing
Hide
Code
Code

```
#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()
```

```
PS F:\Python>
```

CODE:

```
#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time

 import random

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 "identity":{

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 "deviceId":"12345" },

 "auth": {"token": "12345678" }

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