Publish Data to IBM cloud

Date	14 Monday 2022
Team ID	PNT2022TMID20032
Project Name	Signs with Smart Connectivity for Better RoadSafety

Python Code

publish.py - C:\Users\surya\Desktop\SURYA\NT RPOJECT\Python Script\publish.py (3.11.0)

File Edit Format Run Options Window Help

```
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(1)
```

Ln: 1 Col: 0

subscribe.py - C:\Users\surya\Desktop\SURYA\NT RPOJECT\Python Script\subscribe.py (3.11.0)

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```
import paho.mqtt.client as paho
def on_subscribe(client,userdata,mid,grated_qos):
    print("subscriber:"+str(mid)+str(grated_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()
```

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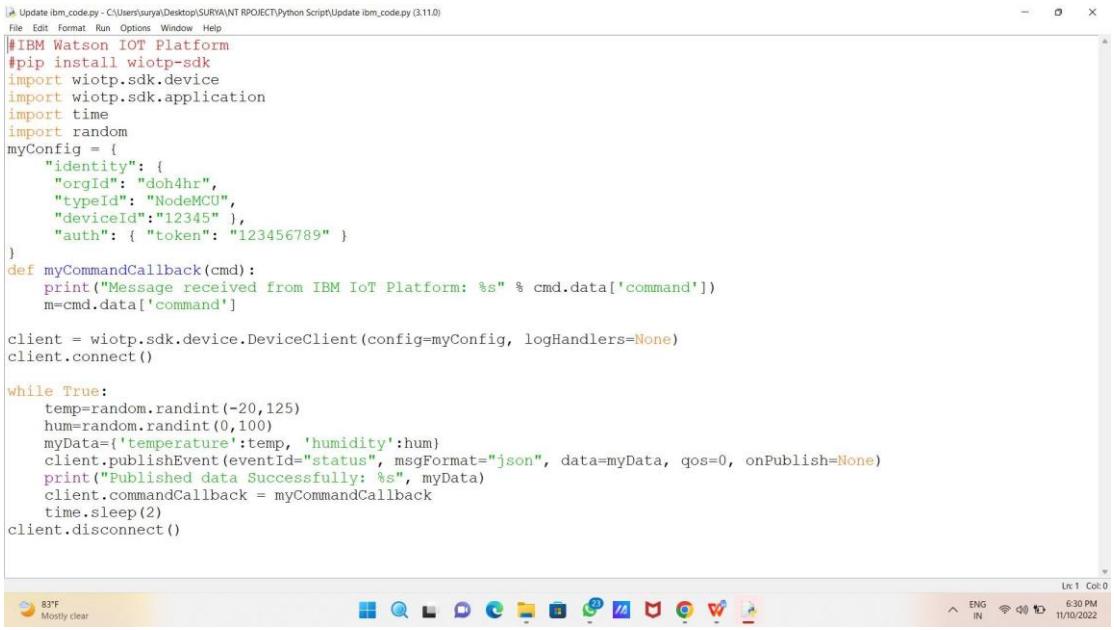
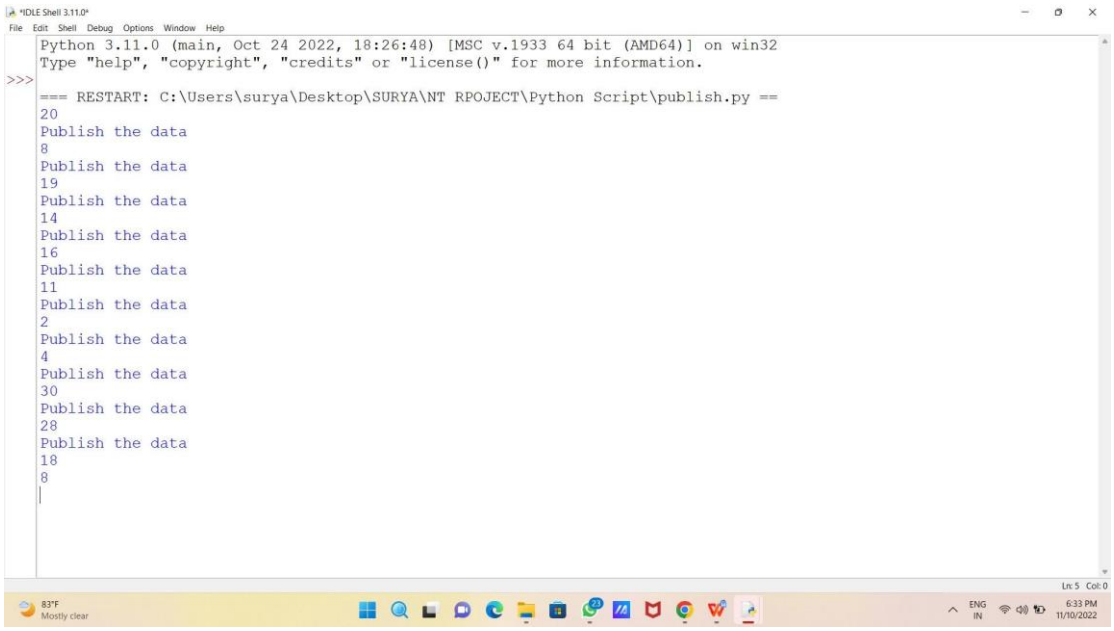

Update ibm_code.py - C:\Users\surya\Desktop\SURYA\NT RPOJECT\Python Script\Update ibm_code.py (3.11.0)
File Edit Format Run Options Window Help
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import wiotp.sdk.application
import time
import random
myConfig = {
"identity": {
"orgId": "doh4hr",
"typeId": "NodeMCU",
"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()
Ln: 1 Col: 0
83°F
Mostly clear
ENG
IN
6:30 PM
11/10/2022


IDLE Shell 3.11.0
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: C:\Users\surya\Desktop\SURYA\NT RPOJECT\Python Script\publish.py ==
20
Publish the data
8
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19
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16
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11
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2
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4
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28
Publish the data
18
8
Ln: 5 Col: 0
83°F
Mostly clear
ENG
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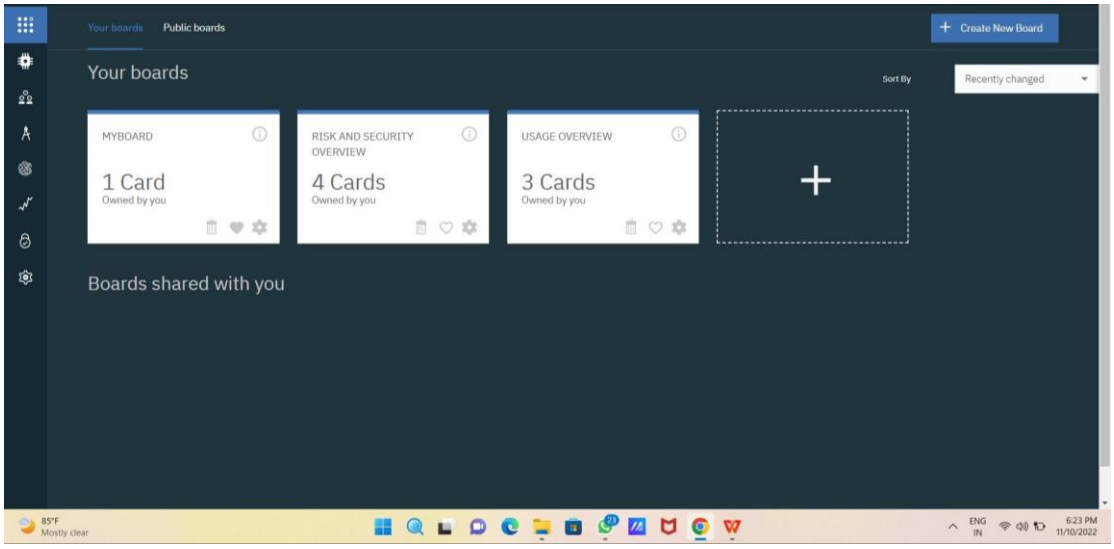
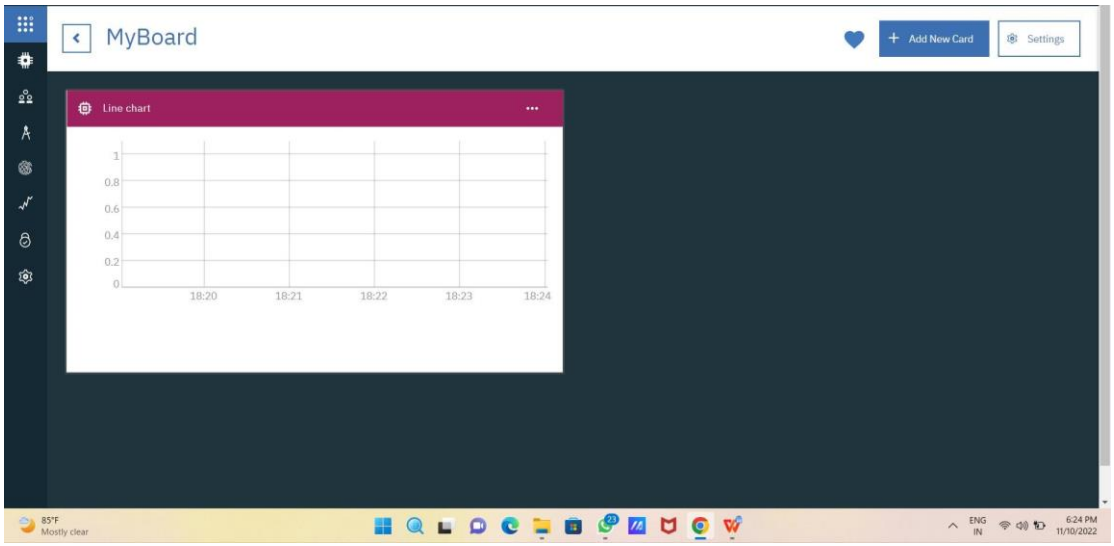
6:33 PM
11/10/2022






```
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#pip install wiotp-sdk import
wiotp.sdk.device import
wiotp.sdk.application import
time import random
myConfig = {
    "identity": {
     "orgId": "doh4hr",
     "typeId": "NodeMCU",
     "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()
```