

Develop a python script Publish Data to the IBM Cloud

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SIGN WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

The image displays two screenshots of a Windows environment, likely a virtual machine, showing Python code and its execution results.

Top Screenshot:

The left window shows a Python script for publishing data to an MQTT broker. The code is as follows:

```
#Through python coding we are going to access the subscriber
import paho.mqtt.client as paho
import time
import random

def on_publish(client, userdata, 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)
```

The right window shows the terminal output of the script. It displays the Python version and the output of the script:

```
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 informati
n.
>>>
===== RESTART: E:\IBM\Others\Develop a python script\
publish.py =====
7
Publish the data
19
Publish the data
10
Publish the data
```

Bottom Screenshot:

The left window shows a Python script for subscribing to an MQTT broker. The code is as follows:

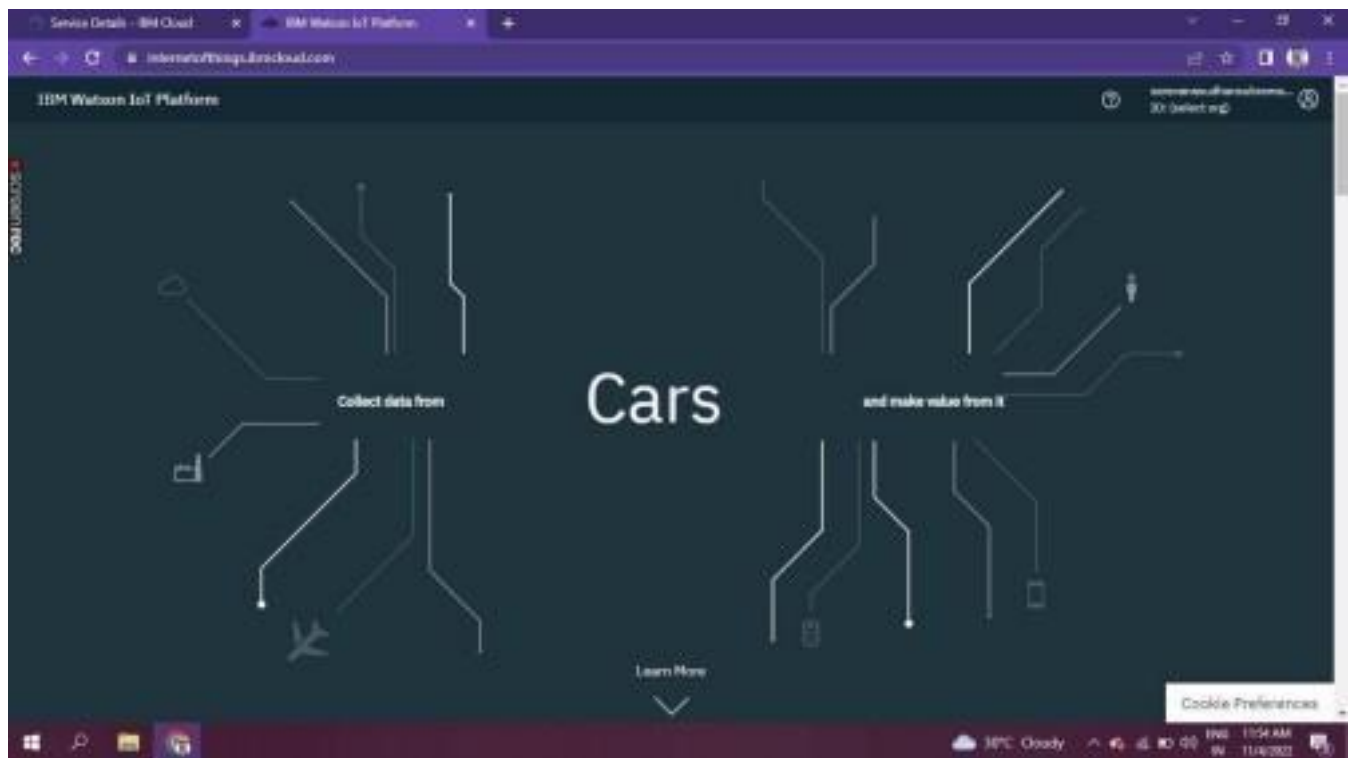
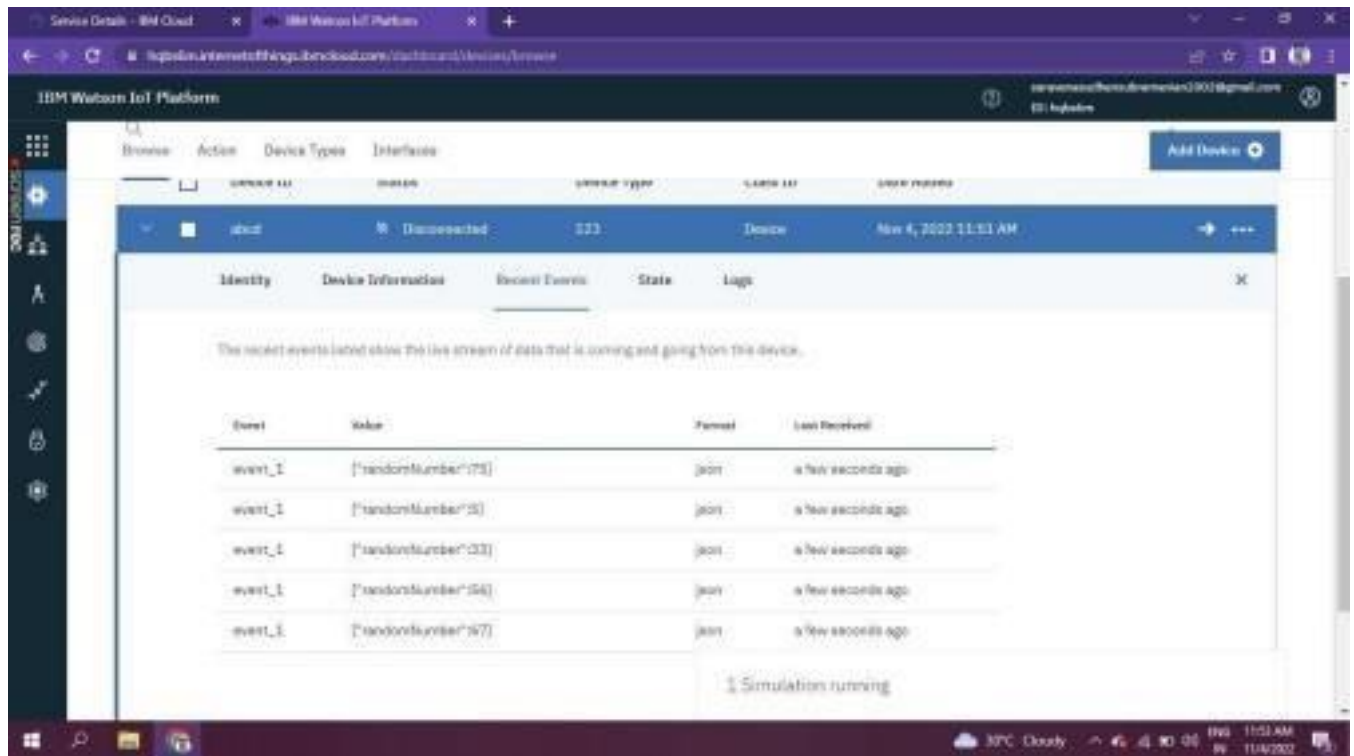
```
import paho.mqtt.client as paho
def on_subscribe(client,userdata,mid,grated_qos):
    print("subscriber" + str(mid)+str(granted_qos))

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()
```

The right window shows the terminal output of the script. It displays the output of the script:

```
Publish the data
13
Publish the data
3
Publish the data
25
Publish the data
19
Publish the data
2
Publish the data
7
Publish the data
9
Publish the data
```



Program :

#IBM Watson IOT Platform

#pip install wiotp-sdk import

wiotp.sdk.device import time

import random myConfig = {

"identity":

{

 "orgId": "dxjch6 ",

 "typeId": "python ",

 "deviceId": "0987 " },

 "auth": { "token": "olqX0blqLLtK01uz65 " }

}

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()