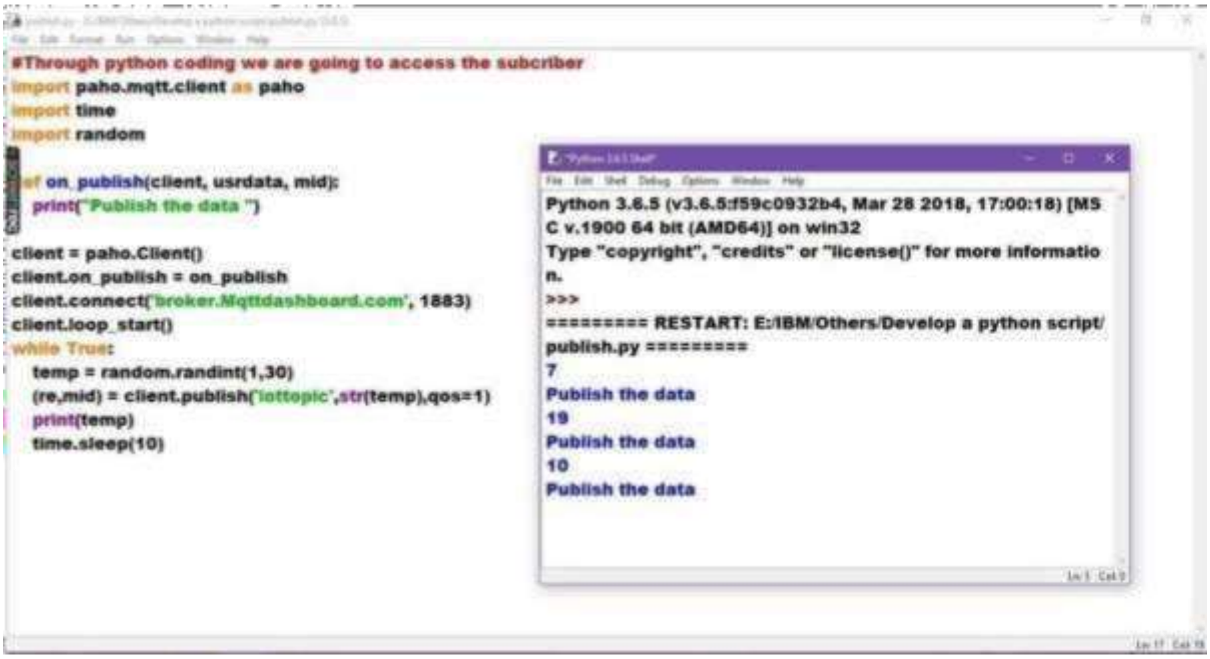
Develop the Python Script

(Publish data to IBM cloud)

Date	08 November 2022
Team ID	PNT2022TMID25436
Project Name	Industry-specific intelligent fire management system

Industry-specific intelligent fire management system

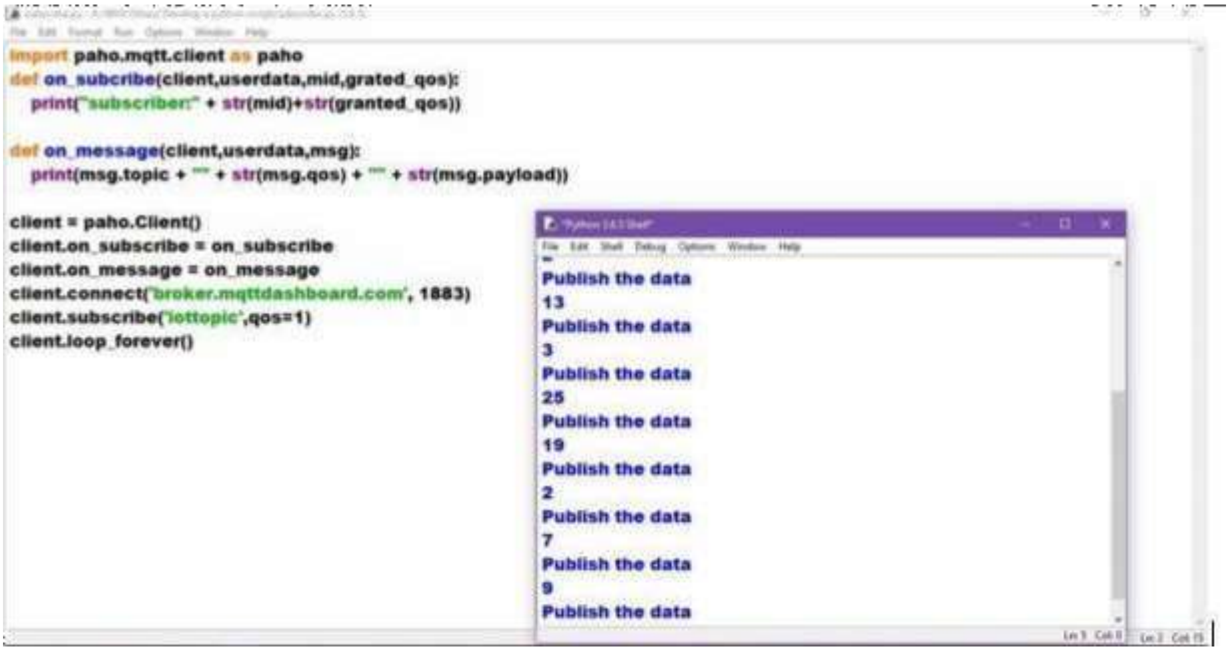


```
#Through python coding we are going to access the subcriber
import paho.mqtt.client as paho
import time
import random

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



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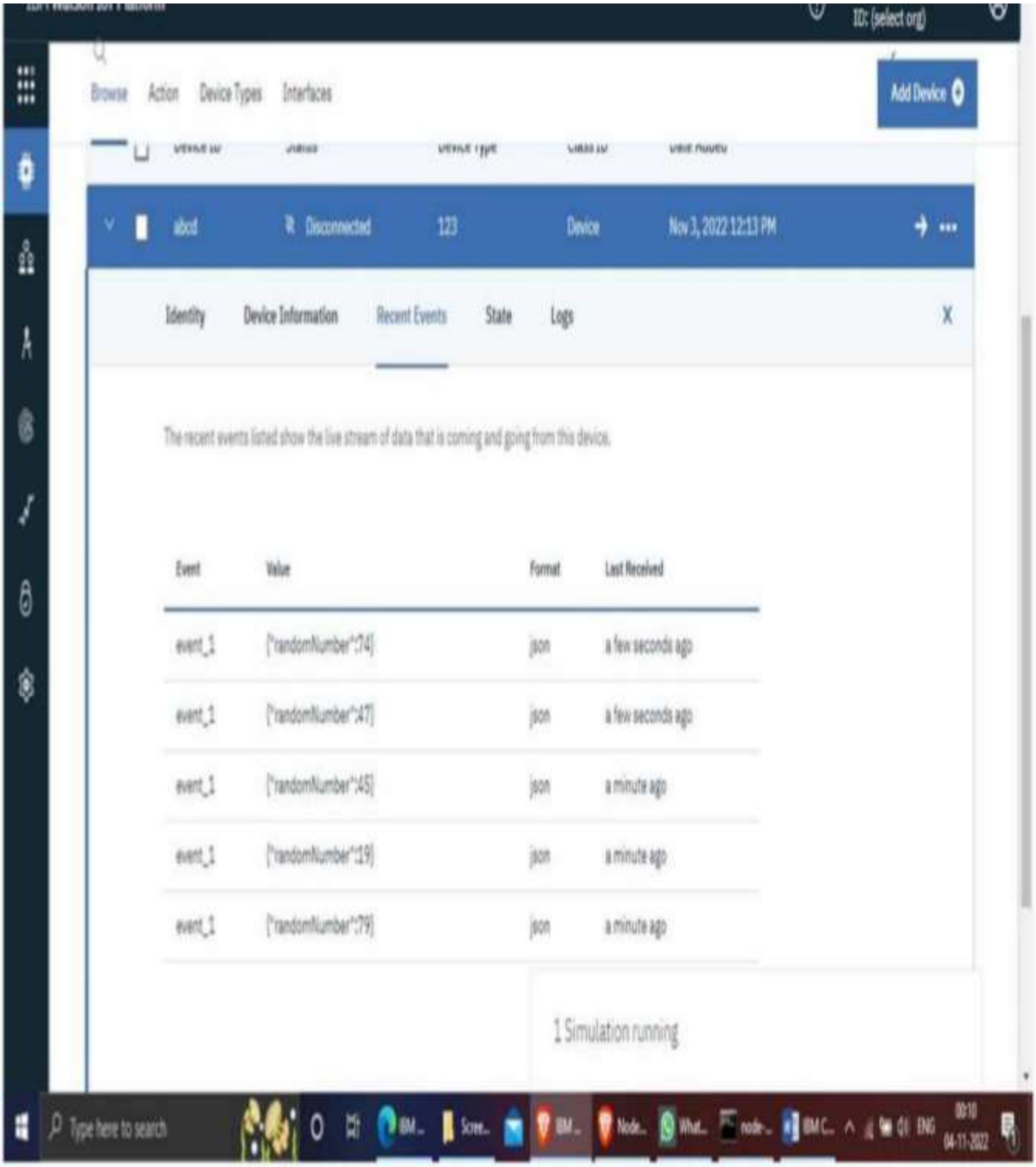
```
import paho.mqtt.client as paho
def on_subcribe(client,userdata,mid,grated_qos):
   print("subscriber:" + str(mid)+str(granted_qos))

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
Publish the data
2
Publish the data
7
Publish the data
9
Publish the data
```



Device ID	Status	Device Type	Class ID	Date Added
abcd	Disconnected	123	Device	Nov 3, 2022 12:13 PM

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1	{"randomNumber":74}	json	a few seconds ago
event_1	{"randomNumber":47}	json	a few seconds ago
event_1	{"randomNumber":45}	json	a minute ago
event_1	{"randomNumber":19}	json	a minute ago
event_1	{"randomNumber":79}	json	a minute ago

1 Simulation running

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()
```