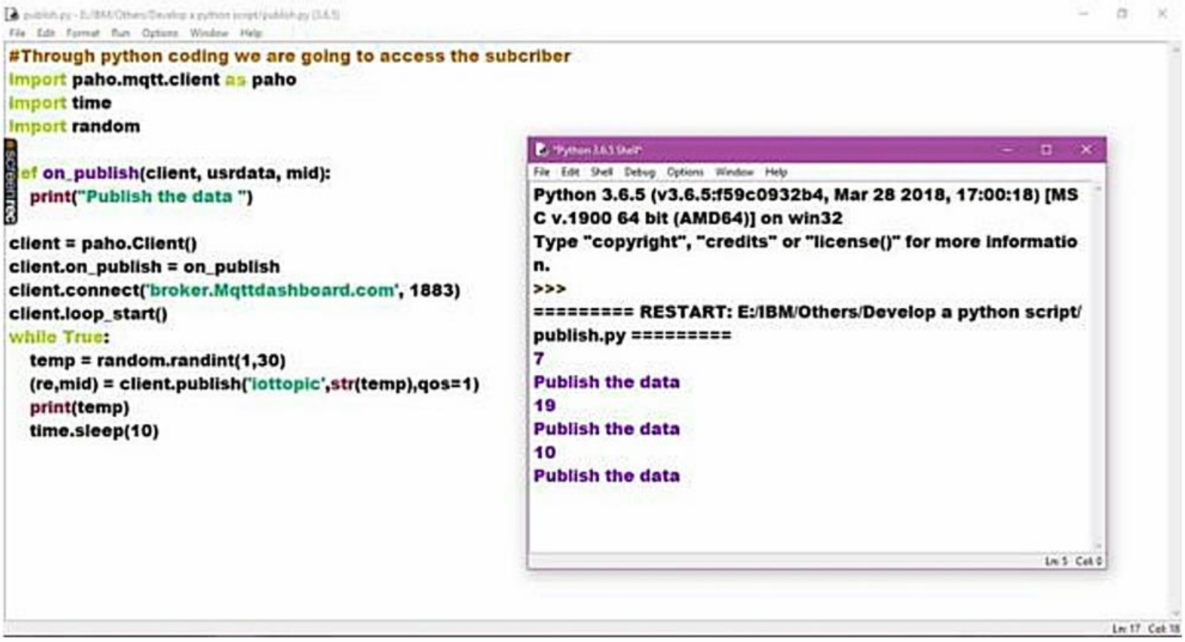
Develop the Python Script

(Publish data to IBM cloud)

Date	04 November 2022
Team ID	PNT2022TMID47980
Project Name	Industry-Specific Intelligent Fire Management System
Maximum Marks	4 Marks

Industry-Specific Intelligent Fire Management ystem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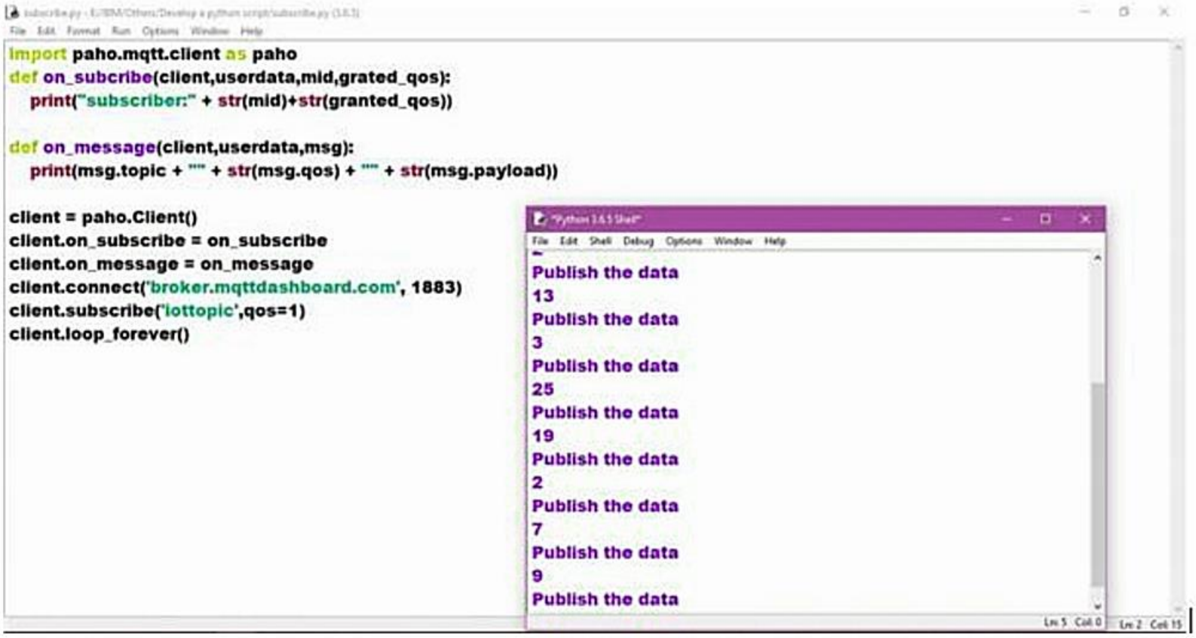
```
#Through python coding we are going to access the subcriber
import paho.mqtt.client as paho
import time
import random

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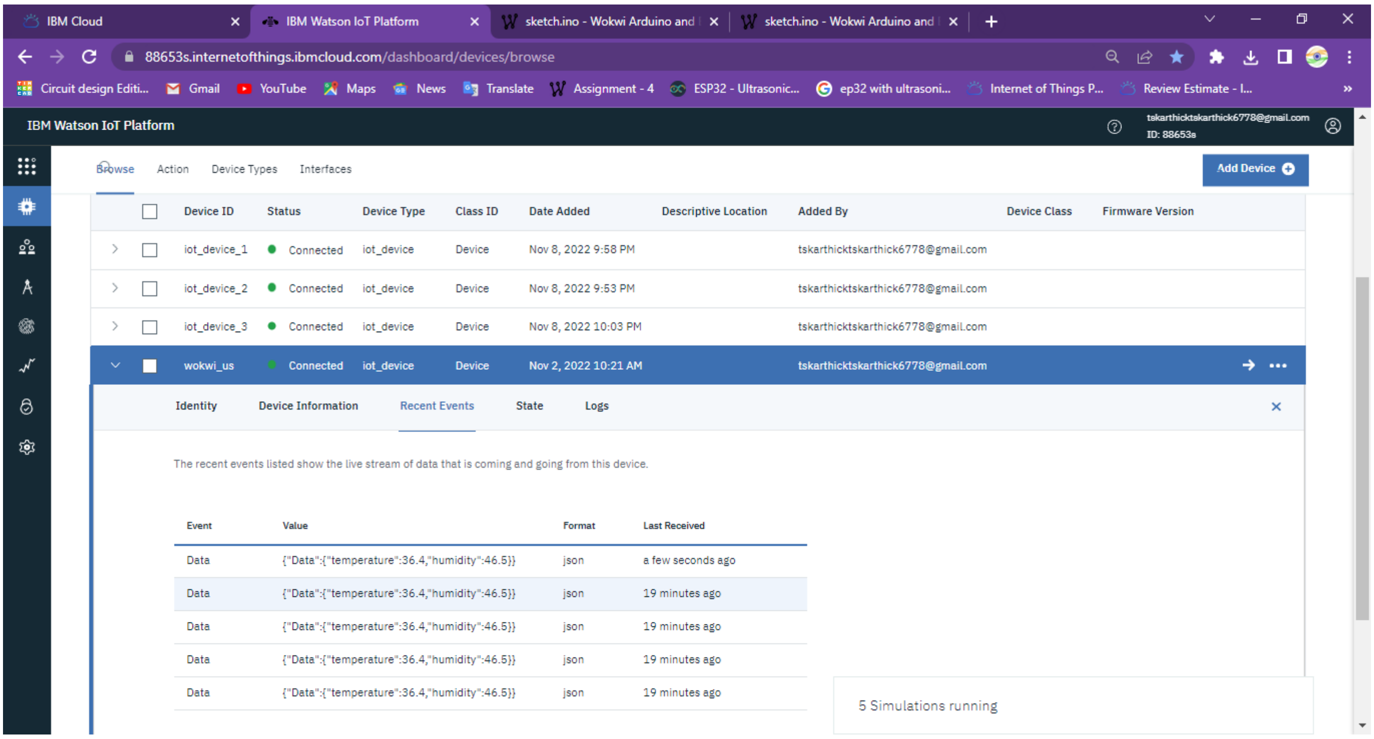
```
import paho.mqtt.client as paho
def on_subcribe(client,userdata,mid,grated_qos):
  print("subscriber:" + str(mid)+str(granted_qos))

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	Descriptive Location	Added By	Device Class	Firmware Version
□	iot_device_1	● Connected	iot_device	Device	Nov 8, 2022 9:58 PM		tskarthicktskarthick6778@gmail.com		
□	iot_device_2	● Connected	iot_device	Device	Nov 8, 2022 9:53 PM		tskarthicktskarthick6778@gmail.com		
□	iot_device_3	● Connected	iot_device	Device	Nov 8, 2022 10:03 PM		tskarthicktskarthick6778@gmail.com		
□	wokwi_us	● Connected	iot_device	Device	Nov 2, 2022 10:21 AM		tskarthicktskarthick6778@gmail.com		

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

Event	Value	Format	Last Received
Data	{"Data":{"temperature":36.4,"humidity":46.5}}	json	a few seconds ago
Data	{"Data":{"temperature":36.4,"humidity":46.5}}	json	19 minutes ago
Data	{"Data":{"temperature":36.4,"humidity":46.5}}	json	19 minutes ago
Data	{"Data":{"temperature":36.4,"humidity":46.5}}	json	19 minutes ago
Data	{"Data":{"temperature":36.4,"humidity":46.5}}	json	19 minutes ago

5 Simulations running

Program:

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {"identity":
{
   "orgId": "88653s",
   "typeId": "iot_device",
   "deviceId":"wokwi_us"},
   "auth": {"token": ")1(uiYYO)Nmkr9sk(k"}
}
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()
```