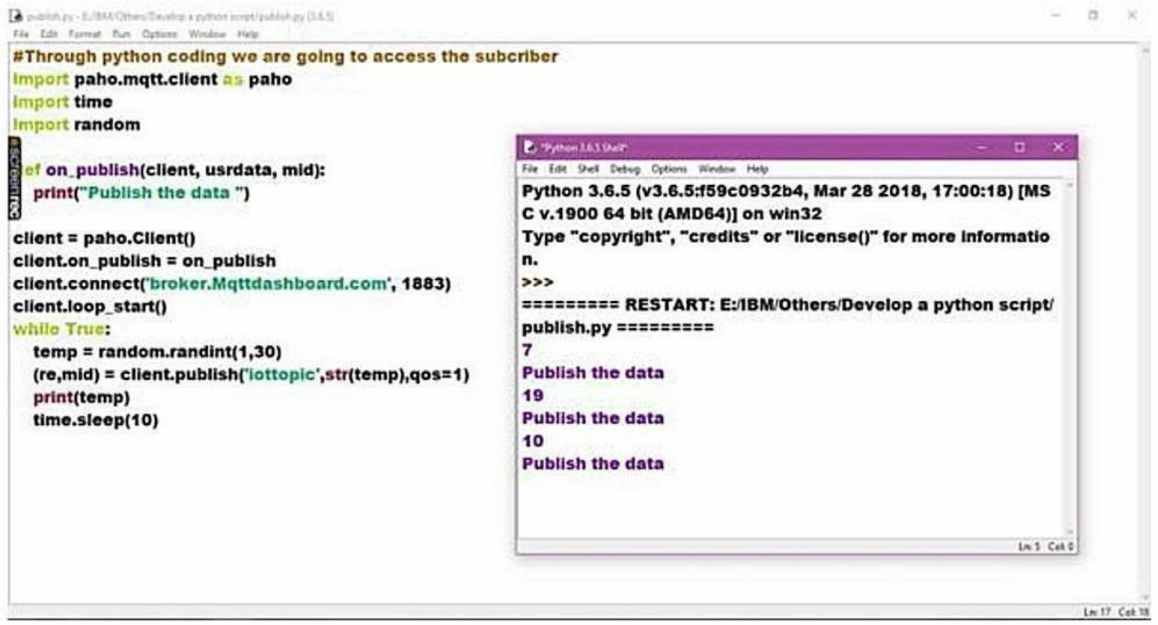
Develop the Python Script

(Publish data to IBM cloud)

Date	November 2022
Team ID	PNT2022TMID33937
Project Name	Industry-Specific Intelligent Fire Management System
Maximum Marks	4 Marks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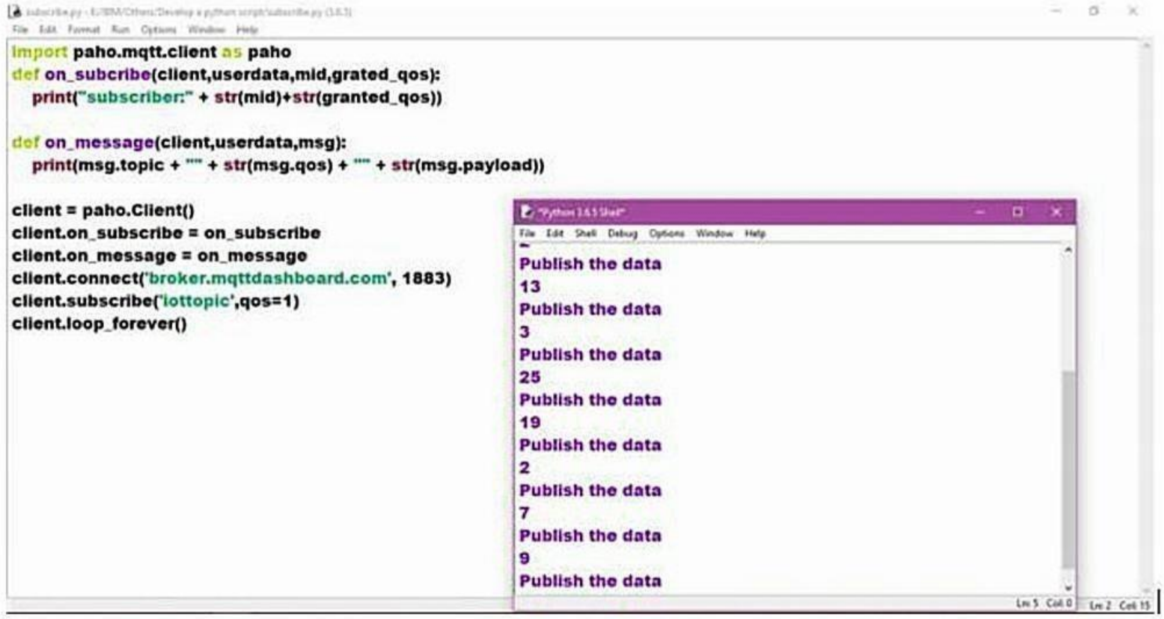
```
#Through python coding we are going to access the subcriber
import paho.mqtt.client as paho
import time
import random

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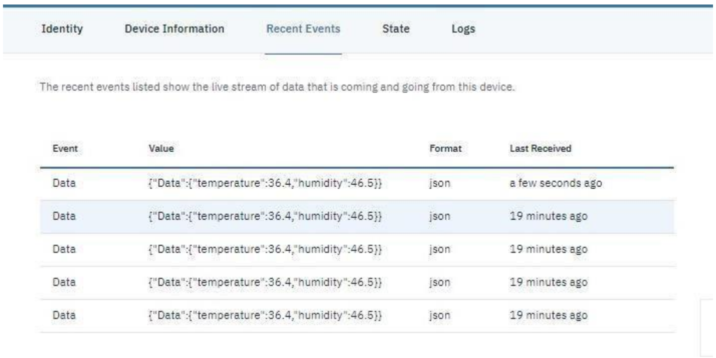
```
import paho.mqtt.client as paho
def on_subcribe(client,userdata,mid,grated_qos):
   print("subscriber:" + str(mid)+str(granted_qos))

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
```



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

Program:

```
   #IBM Watson IOT
   Platform #pip install
   wiotpsdk 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()
```