

# DEVELOP THE PYTHON SCRIPT(PUBLISH DATA TO IBM CLOUD)

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Project Name	Industry-Specific Intelligent Fire Management System



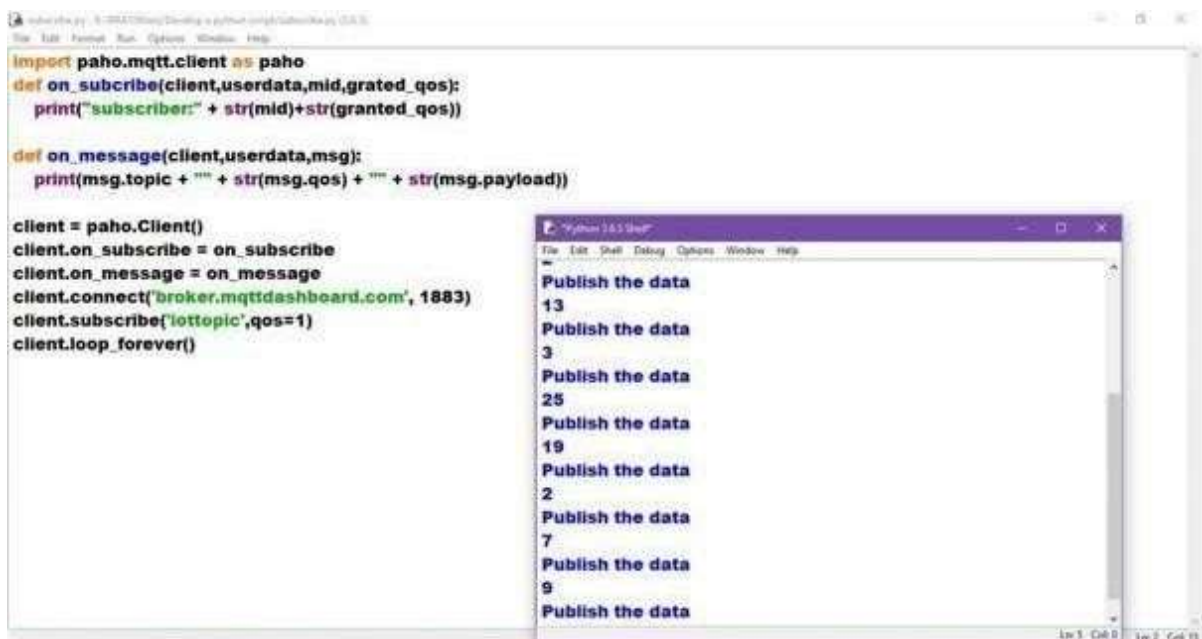
```
#Through python coding we are going to access the subscriber
import paho.mqtt.client as paho
import time
import random

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)
```

```
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
```



```
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()
```

```
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 screenshot shows the IBM Cloud IoT Platform console. At the top, there's a navigation bar with 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is on the left. A sidebar on the left contains icons for various functions. The main content area shows a device named 'abcd' with a status of 'Disconnected'. Below the device header, there are tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is active, showing a table of events. The table has columns for 'Event', 'Value', 'Format', and 'Last Received'. The events listed are 'event\_1' with values like 'randomNumber:74', 'randomNumber:47', 'randomNumber:45', 'randomNumber:19', and 'randomNumber:79'. The 'Last Received' column shows timestamps like 'a few seconds ago' and 'a minute ago'. At the bottom of the console, a status message says '1 Simulation running'.

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()
```