DEVELOP A PYTHON SCRIPT
(PUBLISH DATA TO IBM CLOUD)

DATE	15 NOVEMBER 2022
TEAM ID	PNT2022TMID14209
PROJECT NAME	INDUSTRY-SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM

PROGRAM:

```python
#IBM Watson IOT

Platform #pip install

wiotp-sdk import

wiotp.sdk.device

import time import

random

myConfig = {

    "identity": {

        "orgId": "kojkab",

        "typeId": "1234",

        "deviceId":"lee123"

    },

    "auth": {

        "token": "987456321"

    }

}


def myCommandCallback(cmd):
```

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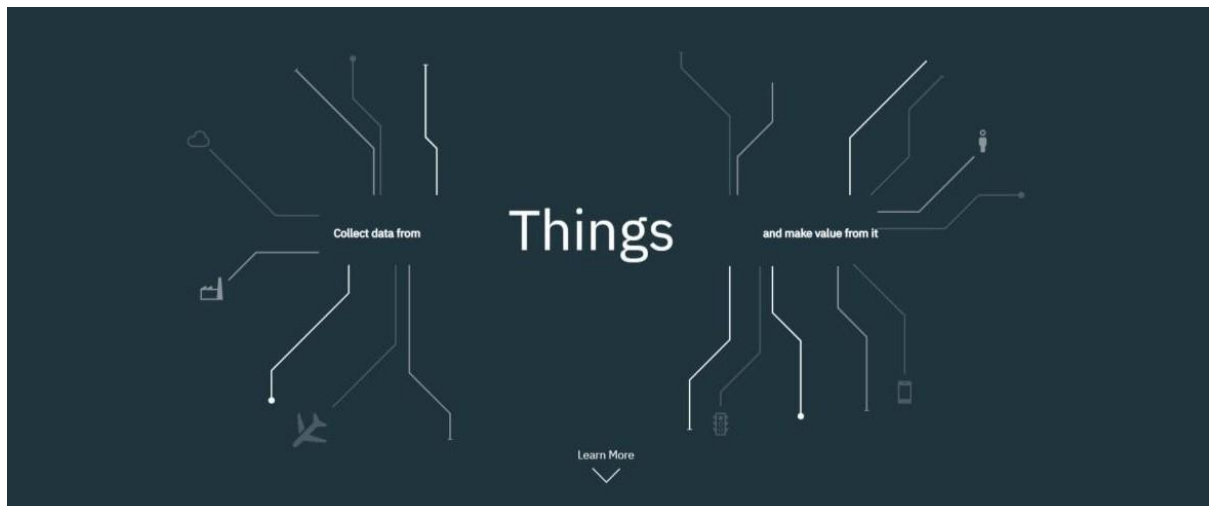
```python
#Through python coding we are going to access the subcriber
import paho.mqtt.client as paho
import time
import random

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
```

Ln 5 Col 0

Ln 17 Col 18

```python
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
```

Ln 5 Col 0   Ln 2 Col 15

Device ID	Status	Device Type	Class ID	Date Added
⌄ ☐ abcd	⚡ Disconnected	123	Device	Nov 3, 2022 12:13 PM → •••

Identity   Device Information   **Recent Events**   State   Logs   ✕

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