DEVELOP A PYTHON SCRIPT

(PUBLISH DATA TO IBM CLOUD)

DATE	19 NOVEMBER 2022
TEAM ID	PNT2022TMID16651
PROJECT NAME	INDUSTRY-SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM
MAXIMUM MARKS	4 MARKS

PROGRAM:

```
#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):
```

```
    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()
```

```
#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
```

```
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
```