

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

DATE	16 NOVEMBER 2022
TEAM ID	PNT2022TMID20484
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": "lee1
        23"
    },
    "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:

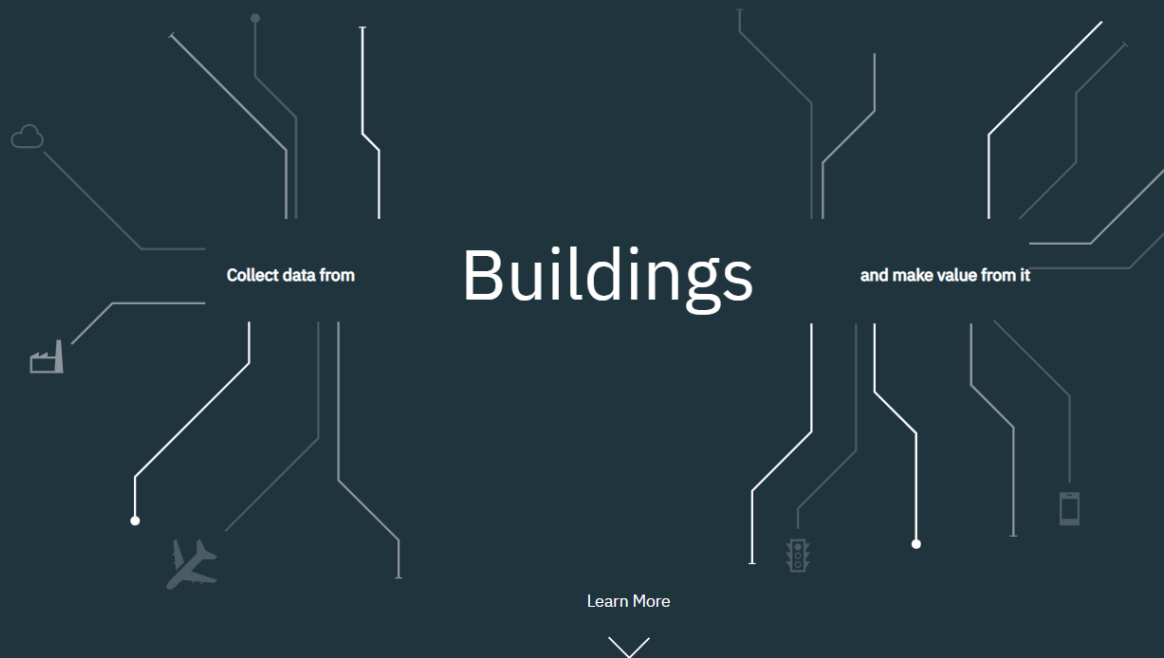
```

```

    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()

```

## IBM Watson IoT Platform



publish.py - E:\B&B\Others\Develop a python script\publish.py (34.5)

File Edit Format Run Options Window Help

**#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("lottopic",str(temp),qos=1)
```

```
    print(temp)
```

```
    time.sleep(10)
```

Python 3.6.5 Shell

File Edit Shell Debug Options

Python 3.6.5 (v3.6.5:d65d4e450, Dec 2 2017)

C v.1900 64 bit (AMD64)

Type "copyright", "credits()" or "help()" to get more help.

>>>

\*\*\*\*\* RESTART \*\*\*\*\*

publish.py \*\*\*\*\*

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Publish the data

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Publish the data

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Publish the data

subscribe.py - E:\BNA\Others\Developing a python script\subscribe.py (3.8.2)

File Edit Format Run Options Window Help

```
import paho.mqtt.client as paho
def on_subscribe(client,userdata,mid,granted_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()
```

Python 3.8.2 Shell

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```
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Publish the data
```

Vatson IoT Platform

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Add Device +

17082001	Connected	fire_IoT	Device	Nov 12, 2022 11:54 AM	→ ...
Identity	Device Information	Recent Events	State	Logs	X
The recent events listed show the live stream of data that is coming and going from this device.					
Event	Value	Format	Last Received		
Data	{"Distance":89.98,"ALERT!!":"Distance less than ...	json	a few seconds ago		
Data	{"Distance":89.98,"ALERT!!":"Distance less than ...	json	a few seconds ago		
Data	{"Distance":89.98,"ALERT!!":"Distance less than ...	json	a few seconds ago		
Data	{"Distance":89.98,"ALERT!!":"Distance less than ...	json	a few seconds ago		
Data	{"Distance":89.98,"ALERT!!":"Distance less than ...	json	a few seconds ago		