DEVELOP A PYTHON SCRIPT

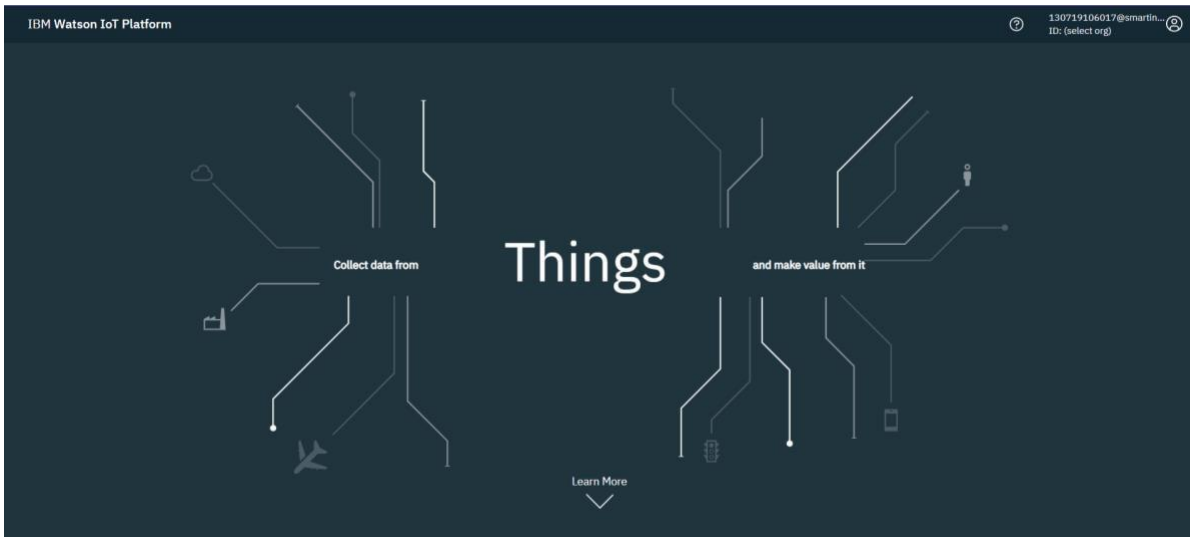
(PUBLISH DATA TO IBM CLOUD)

DATE	16 NOVEMBER 2022
TEAM ID	PNT2022TMID06832
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()
```

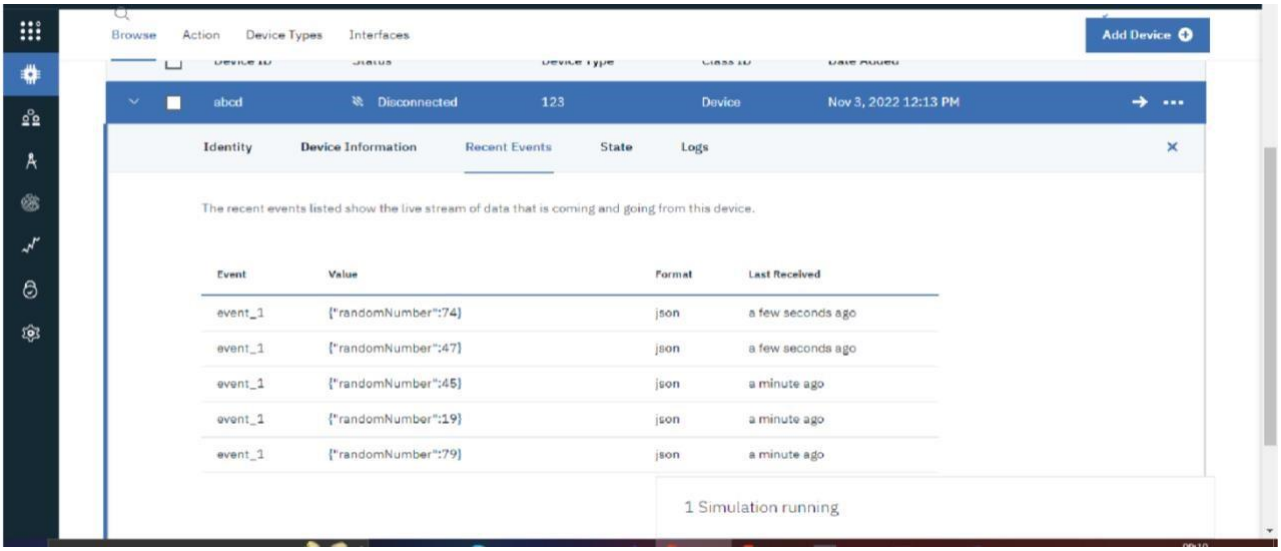


```
#Through python coding we are going to access the subcriber
import paho.mqtt.client as paho
import time
import random

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
```


Browse
Action
Device Types
Interfaces
Add Device
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