

Develop A Python Script To Publish And Subscribe To IBM IoT Platform

Date	7.11.2022
Team ID	PNT2022TMID01185
Project Name	SMART FARMER - IOT ENABLED SMART FARMING APPLICATION SYSTEM
Maximum Marks	2 Marks

CODE:

```
import wiotp.sdk.device
import time
import os
import datetime
import random

myConfig = { "identity": { "orgId": "m5ttid", "typeId": "Device1", "deviceId": "12345"}, "auth": { "token": "12345678" } }

client = wiotp.sdk.device.DeviceClient (config=myConfig, logHandlers=None)

client.connect ()

def myCommandCallback (cmd) :

    print ("Message received from IBM IoT Platform: %s" % cmd.data['command'])

    m=cmd.data['command']

    if (m=="motoron"):

        print ("Motor is switched on")

    elif (m=="motoroff"):

        print ("Motor is switched OFF")

        print (" ")

        while True:

            soil=random.randint(0,100)
```

```

temp=random.randint(-20,125)

hum=random.randint (0, 100)

myData={'soil moisture': soil, 'temperature':temp, 'humidity':hum}

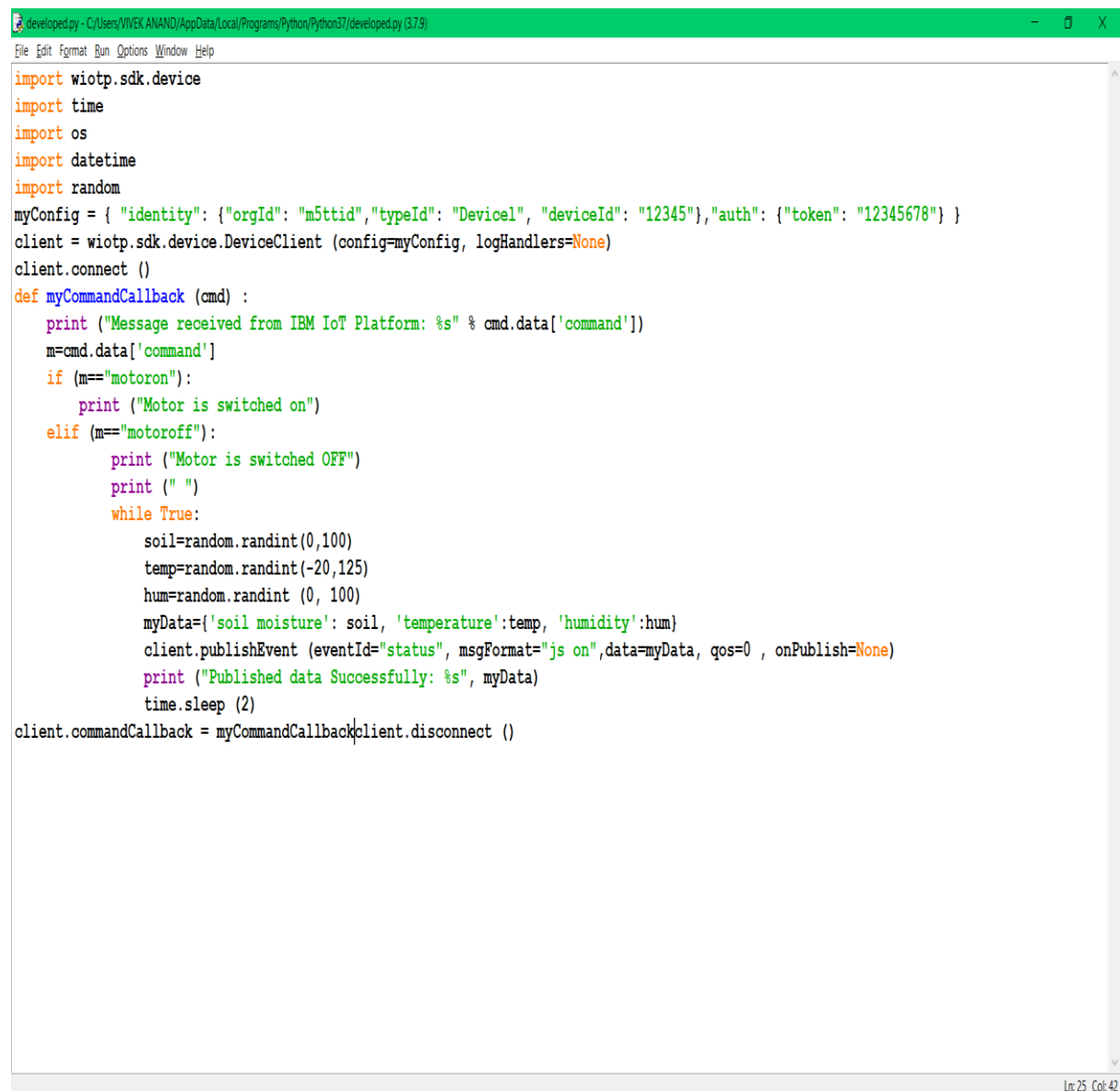
client.publishEvent (eventId="status", msgFormat="js on",data=myData, qos=0 ,
onPublish=None)

print ("Published data Successfully: %s", myData)

time.sleep (2)

client.commandCallback = myCommandCallbackclient.disconnect ()

```



The screenshot shows a code editor window with the following Python code:

```

developed.py - C:/Users/VIVEK ANAND/AppData/Local/Programs/Python/Python37/developed.py (3.7.9)
File Edit Format Run Options Window Help

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client.connect ()

def myCommandCallback (cmd) :
    print ("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']
    if (m=="motoron"):
        print ("Motor is switched on")
    elif (m=="motoroff"):
        print ("Motor is switched OFF")
        print (" ")
        while True:
            soil=random.randint(0,100)
            temp=random.randint(-20,125)
            hum=random.randint (0, 100)
            myData={'soil moisture': soil, 'temperature':temp, 'humidity':hum}
            client.publishEvent (eventId="status", msgFormat="js on",data=myData, qos=0 , onPublish=None)
            print ("Published data Successfully: %s", myData)
            time.sleep (2)

client.commandCallback = myCommandCallbackclient.disconnect ()

```

The status bar at the bottom right indicates "Ln: 25 Col: 42".