

## DEVELOP A PYTHON SCRIPT TO PUBLISH AND SUBSCRIBE TO IBM IOT PLATFORM

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Project Name	SMARTFARMER – IoT ENABLED SMART FARMING APPLICATION

### PROGRAM :

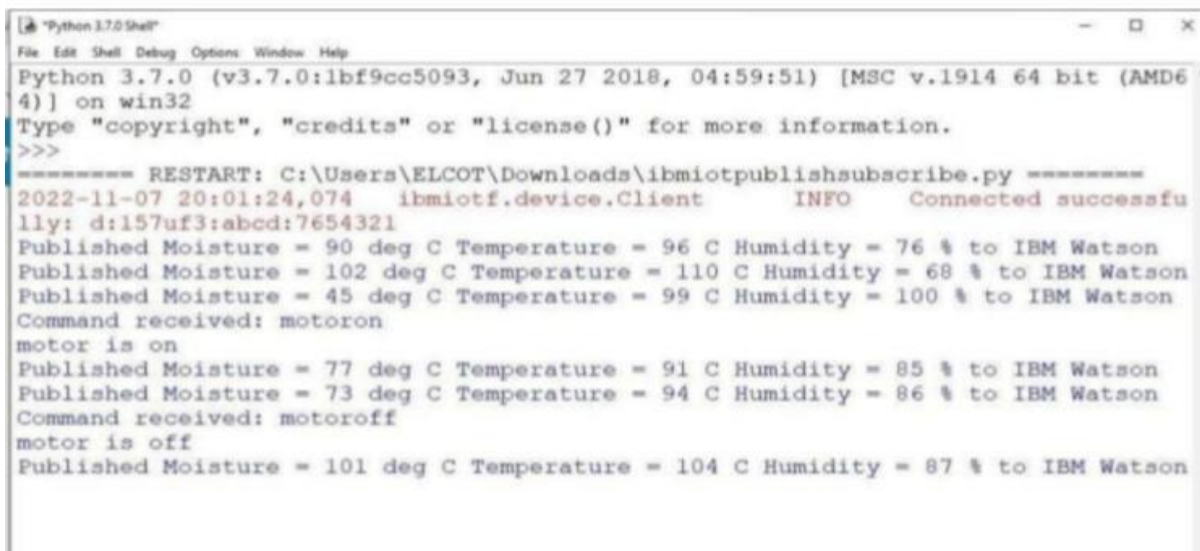
```
import wiotp.sdk.device import time
import os import datetime import
random myConfig = {
"identity": {
"orgId": "3j2gcg",
"typeId": "ultrasonic",
"deviceId": "1407"
},
"auth": {
"token": "140373008"
} }
client = wiotp.sdk.device.DeviceClient (config=myConfig,
logHandlers=None) client.connect () def
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.ra
ndint
(0,100)
temp=random.r andint (-
20,
125)
```

```

hum=random.r
andint (0, 100)
myData={'soil
moisture': soil,
'temperature':te
mp,
'humidity':hum
} client.publishE
vent
(eventId="statu
s",
msgFormat="js
on",
data=myData, qos=0 , onPublish=None) print ("Published
data Successfully: %s", myData) time.sleep (2)
client.commandCallback = myCommandCallback
client.disconnect ()

```

## Output



```

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\ELCOT\Downloads\ibmiotpublishsubscribe.py =====
2022-11-07 20:01:24,074 ibmiotf.device.Client INFO Connected successfully: d:157uf3:abcd:7654321
Published Moisture = 90 deg C Temperature = 96 C Humidity = 76 % to IBM Watson
Published Moisture = 102 deg C Temperature = 110 C Humidity = 68 % to IBM Watson
Published Moisture = 45 deg C Temperature = 99 C Humidity = 100 % to IBM Watson
Command received: motoron
motor is on
Published Moisture = 77 deg C Temperature = 91 C Humidity = 85 % to IBM Watson
Published Moisture = 73 deg C Temperature = 94 C Humidity = 86 % to IBM Watson
Command received: motoroff
motor is off
Published Moisture = 101 deg C Temperature = 104 C Humidity = 87 % to IBM Watson

```