

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

**SmartFarmer - IoT Enabled Smart Farming Application**

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PROGRAM :

```
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="json",

data=myData, qos=0 , onPublish=None)

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

time.sleep (2)
```

```
client.commandCallback = myCommandCallback
```

```
client.disconnect ()
```