

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

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Team ID	PNT2022TMID14846
Project Name	Project - SmartFarmer - IoT Enabled Smart Farming Application

PROGRAM:

```
import wiotp.sdk.device
import time
import os
import datetime
import random
myConfig = {
    "identity": {
        "orgId": "frtg41",
        "typeId": "NodeMCU",
        "deviceId": "12345"
    },
    "auth": {
        "token": "20272931"
    }
}
client=wiotp.sdk.device.DeviceClient(config=myConfig,logHandlers=None)
client.connect ()
def myCommandCallback (cmd) :
    print("MessagereceivedfromIBMIoTPlatform:%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 ()
```