

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

ProjectName	Smart Farmer-IoTEnabledSmartFarming Application
Team ID	PNT2022TMID44065

PYTHON CODE:-

```
import wiotp.sdk.device
import time
import os
import datetime
import random
myConfig = {
    "identity": {
        "orgId": "lzb3pr" ,
        "typeId": "DEENA",
        "deviceId": "12345"
    },
    "auth": {
        "token": "123456789"
    }
}
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 sucessfully: %s",myData)
    time.sleep(2)
    client.commandCallback=myCommandCallback
client.disconnect()
```

```
import wiotp.sdk.device
import time
import os
import datetime
import random
myConfig = {
    "identity": {
        "orgId": "1zb3pr",
        "typeId": "DEENA",
        "deviceId": "12345"
    },
    "auth": {
        "token": "123456789"
    }
}
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 sucessfully: %s",myData)
    time.sleep(2)
    client.commandCallback=myCommandCallback
client.disconnect()
```