

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

Project Name: SmartFarmer-Iot Enabled SmartFarming Application.

Team ID: PNT2022TMID32489

PYTHON PROGRAM:

```
import wiotp.sdk.device
import time
import os
import datetime
import random
myConfig = {
    "identity": {
        "orgId": "7hx5v5",
        "typeId": "Nodemcu",
        "deviceId": "8100"
    },
    "auth": {
        "token": "8100192050"
    }
}
client = wiotp.sdk.device.DeviceClient(config = myConfig,
logHandlers = None)
client.connect()
```

while True:

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

```
    temp = random.randint(-20,125)
```

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

```
    myData =
```

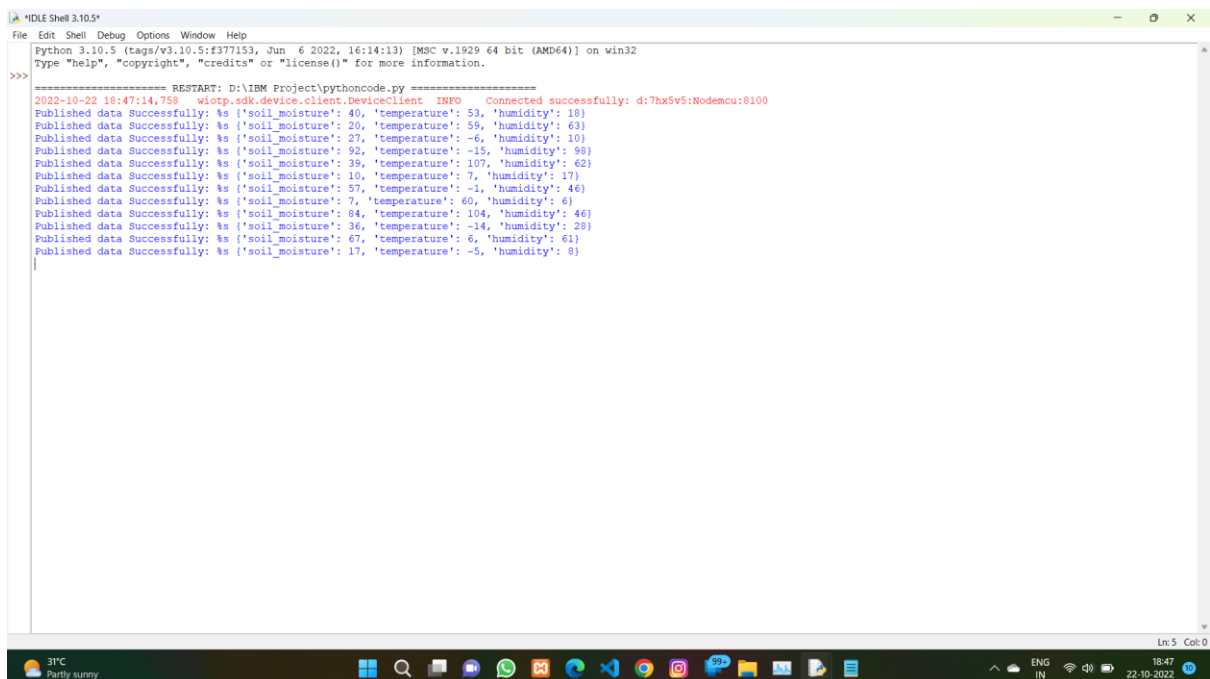
```
{'soil_moisture':moisture,'temperature':temp,'humidity':hum}
```

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

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

```
    time.sleep(2)
```

```
client.disconnect()
```



```
IDLE Shell 3.10.5
File Edit Shell Debug Options Window Help
Python 3.10.5 (tags/v3.10.5:f377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\IBM Project\pythoncode.py =====
2022-10-22 18:47:14,758 aiohttp.device.client.DeviceClient INFO Connected successfully: d:7hx5v5:NodeMCU:8100
Published data Successfully: %s {'soil_moisture': 40, 'temperature': 53, 'humidity': 18}
Published data Successfully: %s {'soil_moisture': 20, 'temperature': 59, 'humidity': 63}
Published data Successfully: %s {'soil_moisture': 27, 'temperature': -6, 'humidity': 10}
Published data Successfully: %s {'soil_moisture': 92, 'temperature': -15, 'humidity': 98}
Published data Successfully: %s {'soil_moisture': 39, 'temperature': 107, 'humidity': 62}
Published data Successfully: %s {'soil_moisture': 10, 'temperature': 7, 'humidity': 17}
Published data Successfully: %s {'soil_moisture': 57, 'temperature': -1, 'humidity': 46}
Published data Successfully: %s {'soil_moisture': 7, 'temperature': 60, 'humidity': 6}
Published data Successfully: %s {'soil_moisture': 84, 'temperature': 104, 'humidity': 46}
Published data Successfully: %s {'soil_moisture': 36, 'temperature': -14, 'humidity': 28}
Published data Successfully: %s {'soil_moisture': 67, 'temperature': 6, 'humidity': 61}
Published data Successfully: %s {'soil_moisture': 17, 'temperature': -5, 'humidity': 8}
>>>
```

