

DEVELOP A PYTHON SCRIPT

Date	10 November 2022
Team ID	PNT2022TMID22887
Project Name	Project - Gas leakage monitoring and alerting system for Industries

PTYHON CODE:

```
import wiotp.sdk.device
```

```
import time
```

```
import random
```

```
myConfig = {
```

```
    "identity": {
```

```
        "orgId": "y2y0te",
```

```
        "typeId": "NodeMCU",
```

```
        "deviceId": "12345"
```

```
    },
```

```
    "auth": {
```

```
        "token": "12345678"
```

```
    }
```

```
}
```

```
def myCommandCallback(cmd):
```

```
    print("Message received from IBM IoT Platform: %s" %  
cmd.data['command'])
```

```
    m=cmd.data['command']
```

```
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
```

```
client.connect()
```

```
while True:
    gas=random.randint(200,1500)
    tem=random.randint(0,100)
    hum=random.randint(0,100)
    pre=random.randint(12,25)
    if gas<1000:
        san=("Normal")
        s1=0
    else:
        san=("Danger Leakage")
        s1=1
    myData={'gaslevel':gas,"status":san,"st":s1,"pr":pre,"temp":tem,"hu":hum}
    #myData={'co2 level in ppm':gas}
    client.publishEvent(eventId="status", msgFormat="json", data=myData,
qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

```
SRCCODE.py - C:\Users\hai\Desktop\SRCCODE.py (3.9.0)
File Edit Format Run Options Window Help

import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "y2y0te",
        "typeId": "NodeMCU",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    gas=random.randint(200,1500)
    tem=random.randint(0,100)
    hum=random.randint(0,100)
    pre=random.randint(12,25)
    if gas<1000:
        san=("Normal")
        sl=0
    else:
        san=("Danger Leakage")
        sl=1
    myData={'gaslevel':gas,"status":san,"st":sl,"pr":pre,"temp":tem,"hu":hum}
    #myData={'co2 level in ppm':gas}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)

client.disconnect()
```

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```
Python 3.9.0 Shell
File Edit Shell Debug Options Window Help

Python 3.9.0 (tags/v3.9.0:9cf6752, Oct 5 2020, 15:34:40) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\hai\Desktop\SRCCODE.py =====
2022-11-19 10:03:53,582 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:y2y0te:NodeMCU:12345
Published data Successfully: %s ('gaslevel': 861, 'status': 'Normal', 'st': 0, '
pr': 19, 'temp': 67, 'hu': 38)
Published data Successfully: %s ('gaslevel': 385, 'status': 'Normal', 'st': 0, '
pr': 12, 'temp': 41, 'hu': 63)
Published data Successfully: %s ('gaslevel': 1139, 'status': 'Danger Leakage', '
st': 1, 'pr': 23, 'temp': 2, 'hu': 15)
Published data Successfully: %s ('gaslevel': 268, 'status': 'Normal', 'st': 0, '
pr': 16, 'temp': 13, 'hu': 74)
Published data Successfully: %s ('gaslevel': 1094, 'status': 'Danger Leakage', '
st': 1, 'pr': 23, 'temp': 1, 'hu': 99)
Published data Successfully: %s ('gaslevel': 1263, 'status': 'Danger Leakage', '
st': 1, 'pr': 12, 'temp': 44, 'hu': 13)
Published data Successfully: %s ('gaslevel': 843, 'status': 'Normal', 'st': 0, '
pr': 14, 'temp': 80, 'hu': 30)
Published data Successfully: %s ('gaslevel': 1132, 'status': 'Danger Leakage', '
st': 1, 'pr': 25, 'temp': 81, 'hu': 53)
Published data Successfully: %s ('gaslevel': 1466, 'status': 'Danger Leakage', '
st': 1, 'pr': 18, 'temp': 47, 'hu': 13)
Published data Successfully: %s ('gaslevel': 681, 'status': 'Normal', 'st': 0, '
pr': 14, 'temp': 72, 'hu': 42)
Published data Successfully: %s ('gaslevel': 1207, 'status': 'Danger Leakage', '
st': 1, 'pr': 23, 'temp': 7, 'hu': 52)
```

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Activate Windows
Go to Settings to activate Windows.