

DEVELOP THE PYTHON CODE

PROJECT TITLE	Gas Leakage Monitoring & Alerting System
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PYTHON CODE:

```
#IBM Watson IOT Platform
```

```
#pip install wiotp-sdk
```

```
import wiotp.sdk
```

```
import time
```

```
import random
```

```
myConfig = {  
    "identity": {  
        "orgId": "mz6rat",  
        "typeId": "ESP8266",  
        "deviceId": "12345"  
    },  
    "auth": {  
        "token": "123456789"  
    }  
}
```

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

```

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

    m=cmd.data['command']

string=""

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

while True:

    temp=random.randint(0,100)
    if temp>80:
        string="Leakage detected Level =" +str(temp)
    else:
        string="No Leakage detected Level =" +str(temp)
    myData={"Status":string}
    client.publishEvent(eventId="status", msgFormat="json",
data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(5)
client.disconnect()

```

OUTPUT:

```
projectipy - C:\Users\Arum K\Downloads\projectipy (3.7.0)
File Edit Format Run Options Window Help

# IBM Watson IoT Platform
# pip install wattp-sdk
import wattp.sdk
import time
import random

myConfig = {
    "identity": {
        "clientId": "2126262",
        "typeOfId": "55552266",
        "deviceId": "123456789"
    },
    "auth": {
        "token": "123456789"
    }
}

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

string=""
client = wattp.sdk.device.DeviceClient(config=myConfig, logHandler=
client.connect()

while True:
    temprandom.randint(0,100)
    if temprand:
        string="Leakage detected Level %s"%str(tempr)
    else:
        string="No Leakage detected Level %s"%str(tempr)
    myData={"status":string}
    client.publishEvent(eventId="status", noformat="json", data
    print("Published data Successfully: %s" % myData)
    client.commandcallback = myCommandCallback
    time.sleep(5)
client.disconnect()
```

```
Python 3.7.4 Shell
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Python 3.7.4 (tags/v3.7.4:439f35132e, Jul 8 2019, 20:34:20) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
----- RESTART: C:\Users\Arum K\Downloads\projectipy -----
WSID-11-16 11:11:45.645 wattp.sdk.device.client.DeviceClient INFO Connecte
d successfully: deviceId:55552266:12345
Published data Successfully: %s ('Status': 'Leakage detected Level -91')
Published data Successfully: %s ('Status': 'No Leakage detected Level -89')
Published data Successfully: %s ('Status': 'Leakage detected Level -90')
Published data Successfully: %s ('Status': 'No Leakage detected Level -85')
Published data Successfully: %s ('Status': 'Leakage detected Level -91')
Published data Successfully: %s ('Status': 'No Leakage detected Level -82')
Published data Successfully: %s ('Status': 'No Leakage detected Level -86')
Published data Successfully: %s ('Status': 'No Leakage detected Level -81')
>>>
```

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