

DEVELOP THE PYTHON CODE

DOMAIN- IOT

PROJECT TITLE- Gas Leaking Monitoring And Alerting System For Industries

TEAM ID- PNT2022TMID15954

TEAM MEMBERS-

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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:

```
project1 - C:\Users\hru\KDownloads\project1 (3.7.4)
File Edit View Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:6635513e, Jul 8 2019, 20:34:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help()", "copyright()", "credits()" or "license()" for more information.
>>>
----- GETTING: C:\Users\hru\KDownloads\project1.py -----
2022-11-15 21:31:45.645 winapi.device.client.deviceclient 1880 Connect
0 successfully: dimofsubitup0266:12365
Published data Successfully: to ('Status': 'Leakage Detected Level -91')
Published data Successfully: to ('Status': 'No Leakage Detected Level -63')
Published data Successfully: to ('Status': 'Leakage Detected Level -40')
Published data Successfully: to ('Status': 'No Leakage Detected Level -35')
Published data Successfully: to ('Status': 'Leakage Detected Level -91')
Published data Successfully: to ('Status': 'No Leakage Detected Level -22')
Published data Successfully: to ('Status': 'No Leakage Detected Level -36')
Published data Successfully: to ('Status': 'No Leakage Detected Level -81')
In 5 Con 0
```

```
myConfig = {
    "deviceId": "123456789",
    "specId": "123456789",
    "deviceName": "123456789"
}

def myCommandCallback(cmd):
    print("Message received from IOT Platform: %s" % cmd)
    m_cmd_data['command']

string=""
client = winapi.device.client.deviceclient(myConfig, logBandwidth)
client.connect()

while True:
    tempRandom.randint(0,100)
    if temp0:
        string="Leakage detected Level -"+str(temp0)
    else:
        string="No Leakage detected Level -"+str(temp0)
    myData={"Status":string}
    client.publishEvent(eventId="status", msgformat="json", data=myData)
    print("Published data Successfully: to", myData)
    client.commandCallback = myCommandCallback
    time.sleep(5)
client.disconnect()
```