

SPRINT 2

DATE	18/11/2022
TEAM ID	PNT2022TMID22891
PROJECT NAME	GAS LEAKAGE MONITORING AND DETECTING SYSTEM FOR INDUSTRIES
MAXIMUM MARKS	2

CODE DEVELOPMENT IN PYTHON IDLE:

PYTHON PROGRAM:

```
#IBM Watson IOT Platform
```

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

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

```
import time
```

```
import random
```

```
myConfig = {
```

```
    "identity": {
```

```
        "orgId": "yy65z9",
```

```
        "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:

    co2gas=random.randint(400,5000)

    if co2gas<1000:

        sts="no leakage of co2"

    else:

        sts="danger, co2 is leaking"

    methane=random.randint(1000,4000)

    if methane<2000:

        st="no leakage of methane"

    else:

        st="danger, methane is leaking"

    temp=random.randint(-20,50)

    humidity=random.randint(0,100)

    myData={'level':co2gas,"status":
sts,"lvl":methane,"stat":st,"temperature":temp,"humidity":humidity}

    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()
```

CONNECTING THE DEVICE AND CREATING DEVICE ID IN IBM WATSON PLATFORM:

IBM Watson IoT Platform

732919ecr143@smartinternz.com
ID: yy65z9

Browse Action Device Types Interfaces

Add Device

Browse Devices

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12345	Connected	NodeMCU	Device	Nov 1, 2022 1:21 PM	

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0 Simulations running