

SPRINT2

DATE	5 November 2022
TEAM ID	PNT2022TMID22887
PROJECT NAME	Gas Leakage Monitoring and Alerting 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

732919ecr091@smartinternz.com
ID: y2y0te

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 17, 2022 11:37 AM	

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