

PYTHON CODE (GAS, TEMPERATURE, HUMIDITY, PRESSURE)

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Team ID	PNT2022TMID32463
Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

PYTHON CODE

```
#IBM Watson IOT Platform
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "yf0dyy ",
        "typeId": "Faraaz ",
        "deviceId": "12345"
    },
    "auth": {
        "token": "VJTDPRX@f&4Vuox8ms "
    }
}

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(0,100)
```

```
    temp=random.randint(0,100)
```

```
    hum=random.randint(0,100)
```

```
    pre=random.randint(0,100)
```

```
    myData={'Hazardous Gas':gas, 'Temperature':temp, 'Humidity':hum,  
            'Pressure':pre }
```

```
    client.publishEvent(eventId="status", msgFormat="json",
```

```
    data=myData,qos=0, onPublish=None)
```

```
    print("Published data Successfully: %s",
```

```
    myData)    client.commandCallback    =
```

```
    myCommandCallbacktime.sleep(2)
```

```
client.disconnect()
```

OUTPUT:

The screenshot shows the EdgeX Foundry web interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains icons for various functions. The main content area displays details for a device named 'Nagarajan' (Device ID: 12345). The device status is 'Disconnected'. The 'Recent Events' tab is selected, showing a table of events. The table has the following data:

Event	Value	Format	Last Received
event_1	{"Hazardous Gas":61,"Temperature":88,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":20,"Temperature":36,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":79,"Temperature":56,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":52,"Temperature":82,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":26,"Temperature":33,"Humidit...	json	a few seconds ago

At the bottom of the interface, a status bar indicates '1 Simulation running'. There is also a watermark for 'Activate Windows'.

Browse
Action
Device Types
Interfaces

Identity
Device Information
Recent Events
State
Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1	{"Hazardous Gas":57,"Temperature":98,"Humidity":...}	json	a few seconds ago
event_1	{"Hazardous Gas":3,"Temperature":35,"Humidity":...}	json	a few seconds ago
event_1	{"Hazardous Gas":69,"Temperature":74,"Humidity":...}	json	a few seconds ago
event_1	{"Hazardous Gas":85,"Temperature":51,"Humidity":...}	json	a few seconds ago
event_1	{"Hazardous Gas":92,"Temperature":35,"Humidity":...}	json	a few seconds ago

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