

## PYTHON CODE (GAS, TEMPERATURE, HUMIDITY, PRESSURE)

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Team ID	PNT2022TMID33687
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 Azure IoT Hub interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains icons for various IoT Hub features. The main content area displays a table of devices. The selected device is 'Nagarajan' with ID '12345', status 'Disconnected', and class 'Device'. Below the device information, the 'Recent Events' tab is active, showing a table of events. The table has columns for 'Event', 'Value', 'Format', and 'Last Received'. There are five events listed, each with a value in JSON format. At the bottom of the interface, a status bar indicates '1 Simulation running'.

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

1 Simulation running

