

PYTHON CODE (GAS, TEMPERATURE, HUMIDITY, PRESSURE)

Date	3 NOVEMBER 2022
Team ID	PNT2022TMID18879
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 displays a web application interface for managing devices. 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 shows a table of devices with columns: Device ID, Status, Device Type, Class ID, Date Added, and Descriptive Location. A device with ID 12345 is shown as 'Disconnected'. Below the table, a 'Recent Events' section displays a live stream of data. The events are listed in a table with columns: Event, Value, Format, and Last Received. The events show JSON data for 'Hazardous Gas', 'Temperature', and 'Humidity'.

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

