

PYTHON CODE (GAS, TEMPERATURE, HUMIDITY, PRESSURE)

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Team ID	PNT2022TMID42716
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)
```

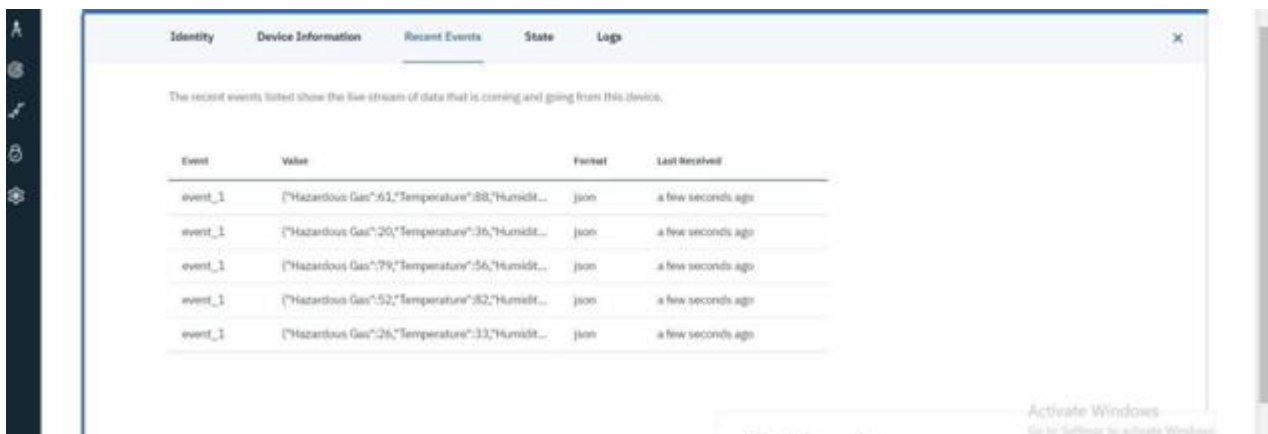
```
    print("Published data Successfully:  %s",
```

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

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

```
client.disconnect()
```

OUTPUT:



The screenshot shows a software interface with a sidebar on the left and a main content area. The main content area has a tabbed interface with 'Recent Events' selected. Below the tabs, there is a table with 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 right of the interface, there is a watermark that says 'Activate Windows' and 'Go to Settings to activate Windows'.



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

Event	Value	Format	Last Receive
event_1	["Hazardous Gas":57,"Temperature":98,"Humidit...	json	a few secoo
event_1	["Hazardous Gas":3,"Temperature":35,"Humidity...	json	a few secoo
event_1	["Hazardous Gas":69,"Temperature":74,"Humidit...	json	a few secoo
event_1	["Hazardous Gas":85,"Temperature":51,"Humidit...	json	a few secoo
event_1	["Hazardous Gas":92,"Temperature":35,"Humidit...	json	a few secoo

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Events 1

New event type

Event type name event_1 Send

Schedule

20 Every Minute

Payload

Specify the event payload in the editor window or by uploading a CSV file.

```
[
  {
    "Hazardous Gas": random(0, 100)
  },
  {
    "Temperature": random(0, 100)
  },
  {
    "Humidity": random(0, 100)
  },
  {
    "Pressure": random(0, 100)
  }
]
```

Cancel Save

Go to Settings to activate Windows