

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

<b>Team ID</b>	PNT2022TMID00378
<b>Project Name</b>	GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

### PYTHON CODE:

```
import random

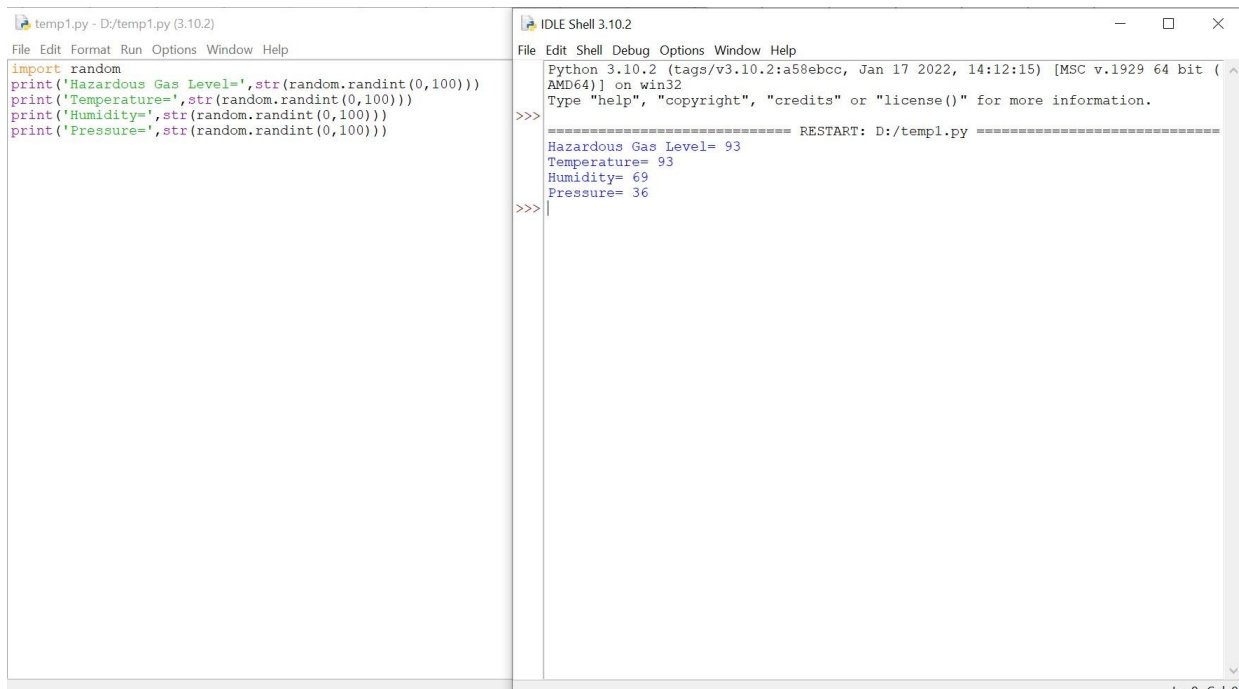
print('Random number =',str(random.randint(0,100)))

print('Temperature=',str(random.randint(0,100)))

print('Humidity=',str(random.randint(0,100)))

print('Pressure=',str(random.randint(0,100)))
```

### OUTPUT:



```
temp1.py - D:/temp1.py (3.10.2)
File Edit Format Run Options Window Help
import random
print('Hazardous Gas Level=',str(random.randint(0,100)))
print('Temperature=',str(random.randint(0,100)))
print('Humidity=',str(random.randint(0,100)))
print('Pressure=',str(random.randint(0,100)))

IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022, 14:12:15) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/temp1.py =====
Hazardous Gas Level= 93
Temperature= 93
Humidity= 69
Pressure= 36
>>>
```

The screenshot displays the IBM Watson IoT Platform interface. On the left is a dark navigation bar with icons for home, devices, actions, interfaces, settings, and a user profile. The main header is "IBM Watson IoT Platform". Below it are tabs for "Browse", "Action", "Device Types", and "Interfaces", with "Browse" selected. A text box states: "This table shows a summary of all devices that have been added. It can be filtered by various criteria. To get started, you can add devices by using the Add Device button, or by using the filters below." Below this is a search bar labeled "Search by Device ID". A table lists devices with columns "Device ID", "Status", and "Device Type". One device is shown with ID "1234", status "Disconnected", and type "GASLEAKAGE". Below the table are tabs for "Identity", "Device Information", and "Recent Events", with "Device Information" selected. A text box says: "You can enter more information about the device for identification purposes." At the bottom, there's a form for "Serial Number" and "Manufacturer". On the right, a modal window titled "Device Type: GASLEAKAGE" is open. It has a "New event type +" button. Under "Events" (count 1), there's a dropdown for "Event type name" set to "event\_1" and a "Send" button. The "Schedule" section shows "20" and "Every Minute". The "Payload" section includes instructions and a JSON editor with the following code:

```
{
  "randomNumber": random(0, 100),
  "temp": random(10, 88),
  "hum": random(80, 100)
}
```

The "Upload a CSV file" button is at the bottom.

IBM Watson IoT Platform

Browse

Action

Device Types

Interfaces

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

Event	Value
po1	{"randomNumber":6,"temp":87,"hum":90}
po1	{"randomNumber":31,"temp":22,"hum":84}
po1	{"randomNumber":45,"temp":10,"hum":96}
po1	{"randomNumber":5,"temp":26,"hum":85}
po1	{"randomNumber":76,"temp":56,"hum":95}

Simulations

Import/Export simulation

1/50 Simulations Running

Select or create a device type...

Device Type

GASLEAKAGE

1 Event

1 Device

1234

1 x Create Simulated Device Use Registered Device

Items per page 50 | 1-1 of 1 item

1 of 1 page

