

PYTHON CODE (GAS, TEMPERATURE, HUMIDITY, PRESSURE)

Date	10 NOVEMBER 2022
Team ID	PNT2022TMID51558
Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

PYTHON CODE

```
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)))
```

OUTPUT:

The screenshot shows two windows from the IDLE 3.9.8 Python IDE. The left window, titled 'python code.py - E:\python\python code.py (3.9.8)', contains the following Python code:

```
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)))
```

The right window, titled 'IDLE Shell 3.9.8', shows the output of the code after execution. It displays a restart message followed by the generated values:

```
Python 3.9.8 (tags/v3.9.8:bb3fddf, Nov 5 2021, 20:48:33) [MSC v.1929 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>>  
===== RESTART: E:\python\python code.py =====>>>  
Hazardous Gas Level= 46  
Temperature= 31  
Humidity= 74  
Pressure= 96  
>>> |
```

The Windows taskbar at the bottom shows the date as 31-10-2022 and the time as 21:40.

1 Simulation running

10:00:00 ID: nurse

Browse Action Device Types Interfaces Add Device

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12345	Disconnected	Nagarajan	Device	Oct 31, 2022 11:38 AM	

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":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":29,"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

Activate Windows
Go to Settings to activate Windows.

10:00:00 ID: nurse

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,"Humidit...	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,"Humidit...	json	a few seconds ago
event_1	["Hazardous Gas":85,"Temperature":51,"Humidit...	json	a few seconds ago
event_1	["Hazardous Gas":92,"Temperature":35,"Humidit...	json	a few seconds ago

Items per page: 50 | 1-1 of 1 item

Device Type: Nagarajan

Events

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.

```
[
  1. "Hazardous Gas": random(0, 100),
  2. "Temperature": random(0, 100),
  3. "Humidity": random(0, 100),
  4. "Pressure": random(0, 100),
  5. ]
```

Cancel Save

Activate Windows
Go to Settings to activate Windows.