

Develop The Python Code

Team ID	PNT2022TMID30616
Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

Source Code:

```
import random

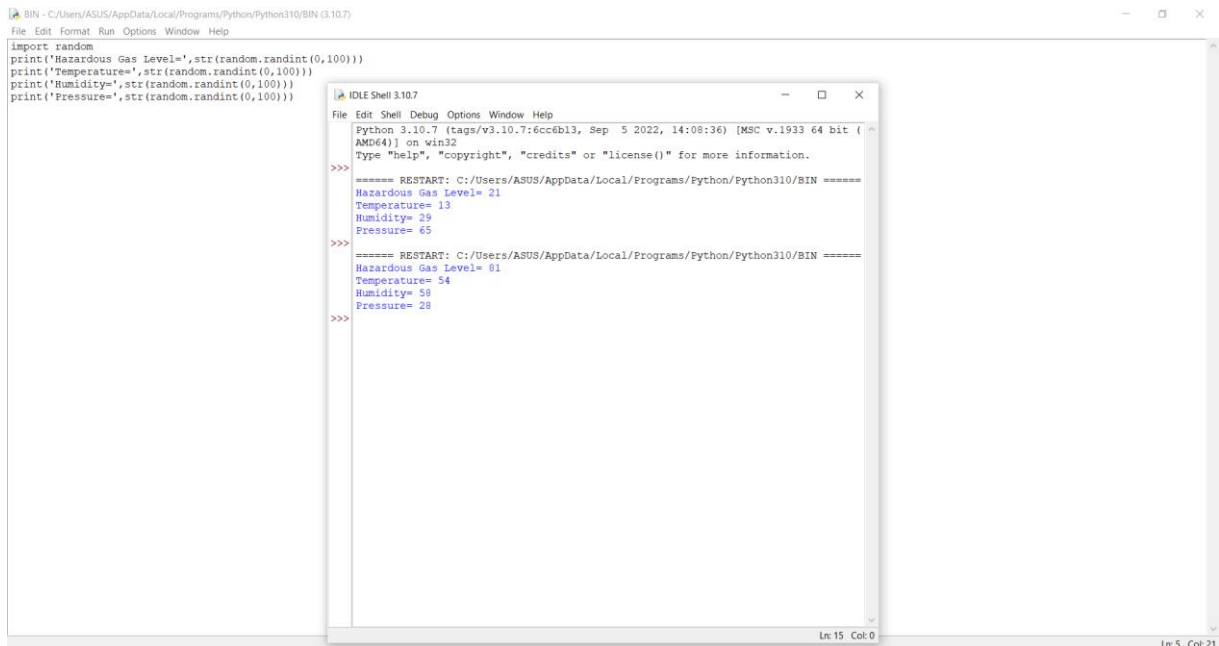
print('Hazardous Gas Level=',str(random.randint(0,100)))

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

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

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

Output:



The screenshot displays the Python IDLE 3.10.7 environment. The main editor window contains the source code for a gas monitoring system. Below it, the IDLE Shell window shows the output of the code, which consists of two restarts of the program. Each restart prints four lines of data: Hazardous Gas Level, Temperature, Humidity, and Pressure, each followed by an equals sign and a random integer value between 0 and 100.

```
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/ASUS/AppData/Local/Programs/Python/Python310/BIN =====
Hazardous Gas Level= 21
Temperature= 13
Humidity= 29
Pressure= 65
>>>
===== RESTART: C:/Users/ASUS/AppData/Local/Programs/Python/Python310/BIN =====
Hazardous Gas Level= 81
Temperature= 54
Humidity= 58
Pressure= 28
>>>
```

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Add Device

Browse

Action

Device Types

Interfaces

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device ID	Status	Device Type	Class ID	Date
1234	Disconnected	GASLEAKAGE	Device	Nov 11, 2022 10:20 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
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Device Type: GASLEAKAGE

Events 1

New event type

Event type name pro1

Send

Schedule 20 Every Minute

Payload

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

```
0 {  
1   "randomNumber": random(0, 100)  
2   "temp": random(10, 88)  
3   "hum": random(80, 100)  
4 }  
5
```

Upload a CSV file

Cancel

Save

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Add Device

Browse

Action

Device Types

Interfaces

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
1234	Disconnected	GASLEAKAGE	Device	Nov 11, 2022 10:20 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
pro1	{"randomNumber":16,"temp":23,"hum":92}	json	a few seconds ago
pro1	{"randomNumber":84,"temp":54,"hum":98}	json	a few seconds ago
pro1	{"randomNumber":88,"temp":19,"hum":83}	json	a few seconds ago
pro1	{"randomNumber":92,"temp":33,"hum":97}	json	a few seconds ago
pro1	{"randomNumber":43,"temp":83,"hum":87}	json	a few seconds ago

Items per page 50

1-1 of 1 item

1 Simulation running