

PYTHON CODE (GAS, TEMPERATURE, HUMIDITY, PRESSURE)

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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 image shows a screenshot of a Python IDE with two windows. The top window is a Python script editor titled 'python.py - C:/Users/Job Alex/AppData/Local/Programs/Python/Python37/python.py (3.7.0)'. It contains the following 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 bottom window is a 'Python 3.7.0 Shell' titled 'Python 3.7.0 Shell'. It shows the output of the script execution:

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:/Users/Job Alex/AppData/Local/Programs/Python/Python37/python.py
Hazardous Gas Level= 68
Temperature= 19
Humidity= 20
Pressure= 89
>>> |
```

The status bar at the bottom of the IDE shows 'Ln: 6 Col: 0'.

IBM Watson IoT Platform

Device Type: ESP32_Controller

Events 1

New event type +

Event type name event_1

Send

Schedule

1 Every Minute

Payload

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

```

0 {
1   "Hazardous Gas": random(0, 100),
2   "Temperature": random(0, 100),
3   "Humidity": random(0, 100),
4   "Pressure": random(0, 100)
5 }
6

```

Cancel Save

Event	Value
event_1	{"Hazardous Gas":40,"Temperature":48,"Huddity"...
event_1	{"Hazardous Gas":31,"Temperature":2,"Huddity"...
event_1	{"Hazardous Gas":17,"Temperature":11,"Huddity"...
event_1	{"Hazardous Gas":44,"Temperature":15,"Huddity"...
event_1	{"Hazardous Gas":62,"Temperature":67,"Huddity"...

IBM Watson IoT Platform

Device: ESP32_Controller

5 Nov 2022 18:48

Add Device +

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":40,"Temperature":48,"Huddity"...	json	a few seconds ago
event_1	{"Hazardous Gas":31,"Temperature":2,"Huddity"...	json	a few seconds ago
event_1	{"Hazardous Gas":17,"Temperature":11,"Huddity"...	json	a few seconds ago
event_1	{"Hazardous Gas":44,"Temperature":15,"Huddity"...	json	a few seconds ago
event_1	{"Hazardous Gas":62,"Temperature":67,"Huddity"...	json	a few seconds ago

1 Simulation running
