

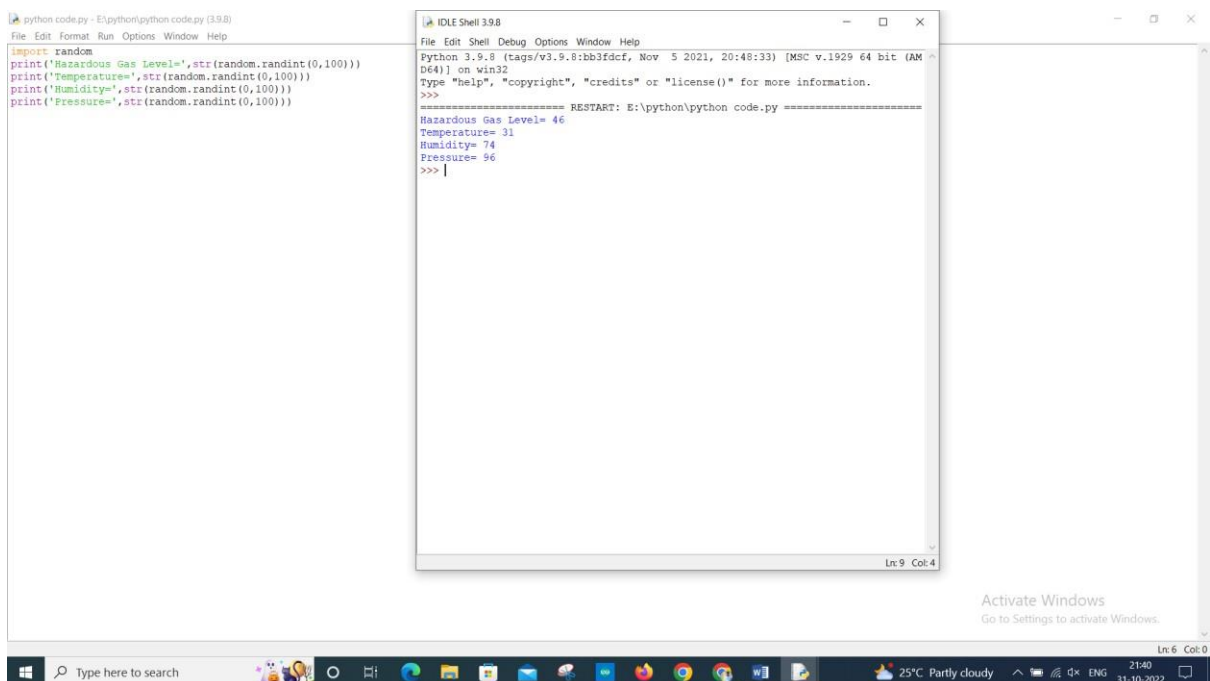
PYTHON CODE (GAS, TEMPERATURE, HUMIDITY, PRESSURE)

Date	31 October 2022
Team ID	PNT2022TMID04619
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 displays a Windows desktop environment. On the left, a window titled 'python code.py - E:\python\python code.py (3.9.8)' shows 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)))
```

On the right, an 'IDLE Shell 3.9.8' window shows the output of the script after execution:

```
Python 3.9.8 (tags/v3.9.8:bb3fdec, 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 system clock as 21:40 on 31-10-2022, with a weather widget indicating 25°C and 'Partly cloudy'.

The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main content area displays the 'Recent Events' tab for a device named 'Kumaran' (ID: 12345). The device status is 'Disconnected' and the last update was on 'Oct 31, 2022 11:38 AM'. Below the tabs, a message states: 'The recent events listed show the live stream of data that is coming and going from this device.' A table lists five recent events, all of type 'event_1' in 'json' format, received 'a few seconds ago'. The table columns are 'Event', 'Value', 'Format', and 'Last Received'. The values are JSON strings containing sensor data like 'Hazardous Gas', 'Temperature', and 'Humidity'. At the bottom, it indicates 'Items per page 50' and '1-1 of 1 item'. A status bar at the very bottom shows '1 Simulation running' and system information like '25°C Partly cloudy' and '21:41 31-10-2022'.

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

This screenshot shows the configuration window for 'Device Type: Kumaran'. The window has a 'Send' button and a 'New event type' button. Under the 'Events' section, 'event_1' is selected. The 'Schedule' is set to 'Every Minute' with a delay of '20'. The 'Payload' section contains a JSON template for the event data. The payload is as follows:

```

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

```

At the bottom of the configuration window, there are 'Cancel' and 'Save' buttons. The background shows the same dashboard as the first screenshot, but the configuration window is overlaid on top.