

PYTHON SCRIPT

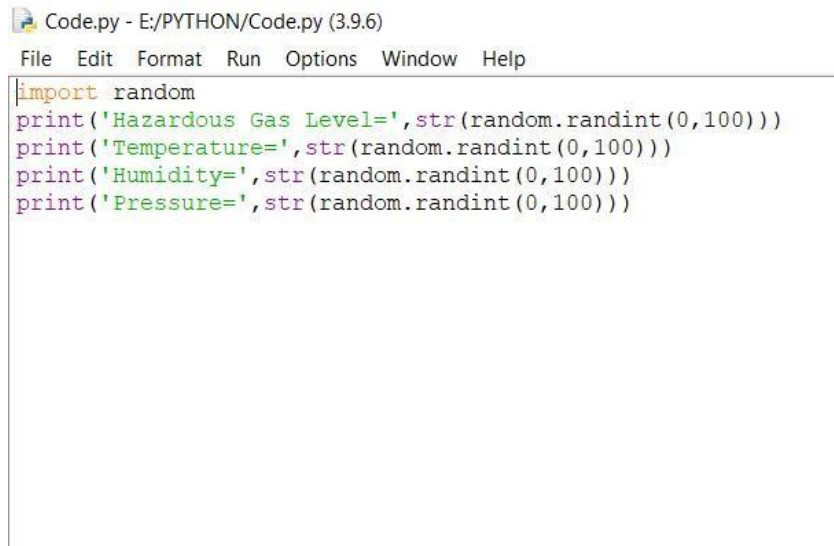
Assignment Date	06 NOVEMBER2022
Team ID	PNT2022TMID08708
Project Name	Gas Leakage Monitoring and Alerting System

AIM:

To install python version 3.9.6 and IBM Watson IoT platform packages in python.

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)))
```

A screenshot of a Python IDE window titled 'Code.py - E:/PYTHON/Code.py (3.9.6)'. The window has a menu bar with 'File', 'Edit', 'Format', 'Run', 'Options', 'Window', and 'Help'. The code editor 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)))
```

RESULT:

The python version 3.9.6 and IBM Watson IoT platform package are installed successfully.

```
Code.py - E:/PYTHON/Code.py (3.9.6)
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 3.9.6
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: E:/PYTHON/Code.py =====
>>>
Hazardous Gas Level= 34
Temperature= 95
Humidity= 22
Pressure= 83
>>>
===== RESTART: E:/PYTHON/Code.py =====
>>>
Hazardous Gas Level= 27
Temperature= 11
Humidity= 14
Pressure= 1
>>>
===== RESTART: E:/PYTHON/Code.py =====
>>>
Hazardous Gas Level= 14
Temperature= 65
Humidity= 71
Pressure= 76
>>> |
```

```
Code.py - E:/PYTHON/Code.py (3.9.6)
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)))
```

Watson Code:

```
{
    "Hazardous Gas": random(0,100),
    "Temperature": random(0,100),
    "Humidity": random(0,100),
    "Pressure": random(0,100)
}
```

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes the IBM logo and a user profile. The main header displays the device name 'lerqn7' and its ID '19bec037@mcet.in'. The 'Recent Events' tab is selected, showing a table of live data streams. The table has four columns: Event, Value, Format, and Last Received. The events listed are temperature and humidity readings. A notification at the bottom right states '1 Simulation running'.

Event	Value	Format	Last Received
status	{"temperature":59,"humidity":43}	json	a few seconds ago
status	{"temperature":18,"humidity":4}	json	a few seconds ago
status	{"temperature":80,"humidity":6}	json	a few seconds ago
status	{"temperature":67,"humidity":4}	json	a few seconds ago
status	{"temperature":83,"humidity":70}	json	a few seconds ago