## Python code for gas leakage monitoring and alerting systems

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {
  "identity": {
    "orgId": "j389m6",
    "typeId": "Device1",
    "deviceId":"1845"
  "auth": {
    "token": "qdIlHUgQZlnES467LC"
}
def myCommandCallback(cmd):
  print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
  m=cmd.data['command']
  if(m=="LIGHTON"):
   print("******///LIGHTS ARE ON///*******")
  elif(m=="LIGHTOFF"):
    print("******///LIGHTS ARE ON///*******")
    print("*******///not found///*******")
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
while True:
  temp=random.randint(0,125)
  hum=random.randint(0,100)
  haz=random.randint(0,100)
  pre=random.randint(0,100)
  myData={'temperature':temp, 'humidity':hum, 'Hazardousgas':haz, 'pressure':pre}
  client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=o,
onPublish=None)
  print("Published data Successfully: %s", myData)
  client.commandCallback = myCommandCallback
  time.sleep(2)
client.disconnect()
```