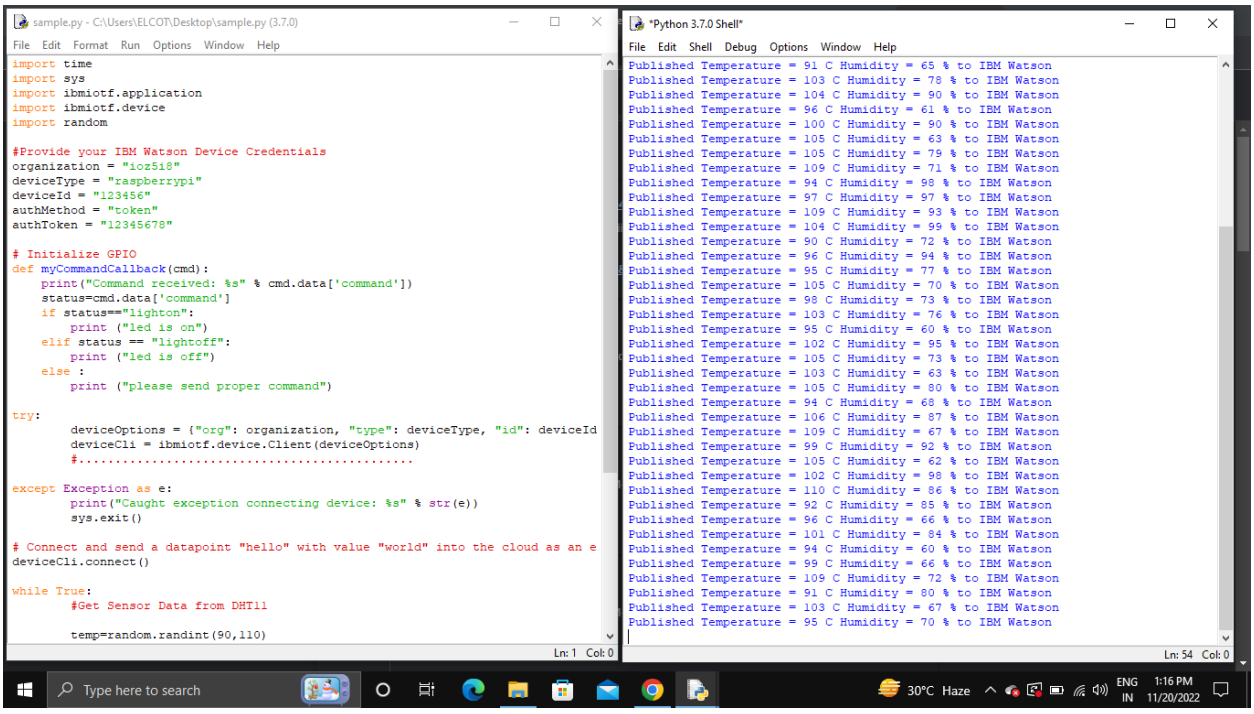
PROJECT NAME	**GAS LEAKAGE MONITORING & ALERTING SYSTEM FOR INDUSTRIES**
TEAM ID	**PNT2022TMID16564**
TEAM MEMBERS	**SANTHOSH S,SARAN S,PRATHAP A,SUNIL KUMAR K**

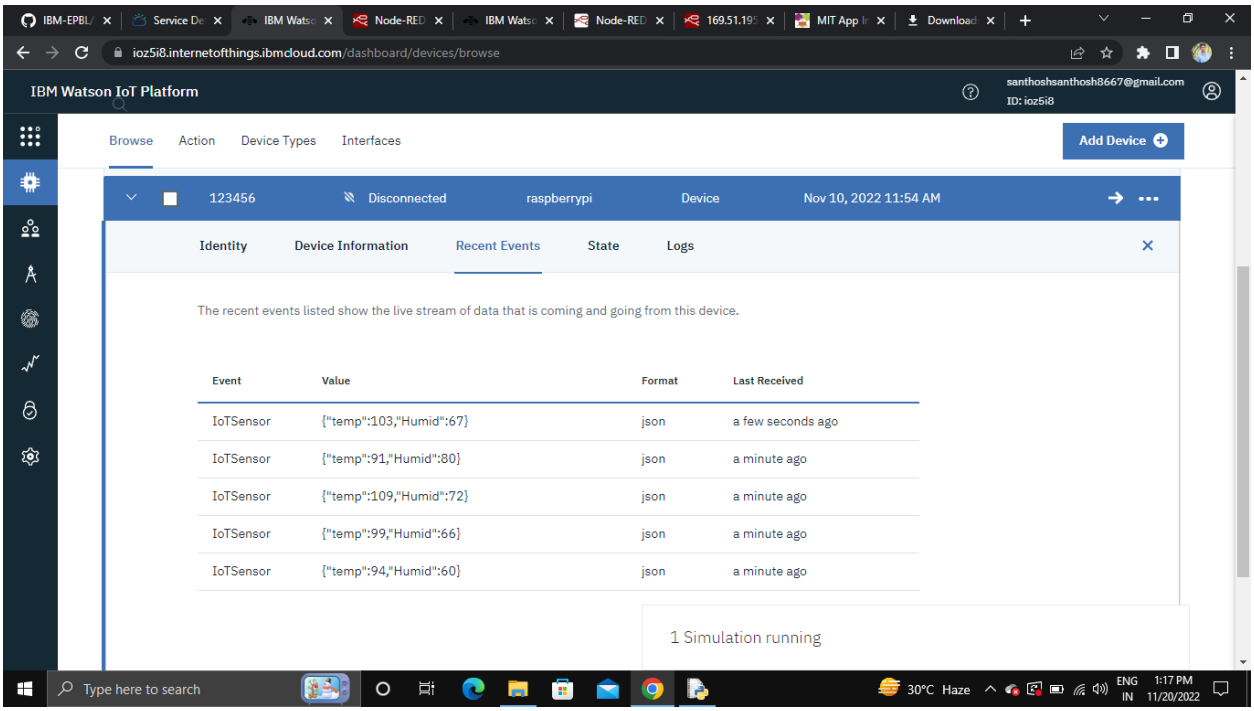
Code:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "ioz5i8"
deviceType = "raspberrypi"
deviceId = "123456"
authMethod = "token"
authToken = "12345678"

# Initialize GPIO
def myCommandCallback(cmd):
   print("Command received: %s" % cmd.data['command'])
   status=cmd.data['command']
   if status=="lighton":
      print ("led is on")
   elif status == "lightoff":
      print ("led is off")
```

```
   else :
      print ("please send proper command")


try:
        deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod, "auth-token": authToken}
        deviceCli = ibmiotf.device.Client(deviceOptions)
        #.....


except Exception as e:
        print("Caught exception connecting device: %s" % str(e))
        sys.exit()


# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10 times
deviceCli.connect()


while True:
      #Get Sensor Data from DHT11


      temp=random.randint(90,110)
      Humid=random.randint(60,100)


      data = { 'temp' : temp, 'Humid': Humid }
      #print data
      def myOnPublishCallback():
        print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % Humid, "to IBM Watson")
```

```
        success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
on_publish=myOnPublishCallback)
        if not success:
            print("Not connected to IoTF")
        time.sleep(10)


        deviceCli.commandCallback = myCommandCallback

# Disconnect the device and application from the cloud
deviceCli.disconnect()
```




IBM Watson IoT Platform
santhoshsanthosh8667@gmail.com
ID: ioz5i8
Browse
Action
Device Types
Interfaces
Add Device
123456
Disconnected
raspberrypi
Device
Nov 10, 2022 11:54 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
IoTSensor
{"temp":103,"Humid":67}
json
a few seconds ago
IoTSensor
{"temp":91,"Humid":80}
json
a minute ago
IoTSensor
{"temp":109,"Humid":72}
json
a minute ago
IoTSensor
{"temp":99,"Humid":66}
json
a minute ago
IoTSensor
{"temp":94,"Humid":60}
json
a minute ago
1 Simulation running
Type here to search
30°C Haze
ENG
IN
1:17 PM
11/20/2022