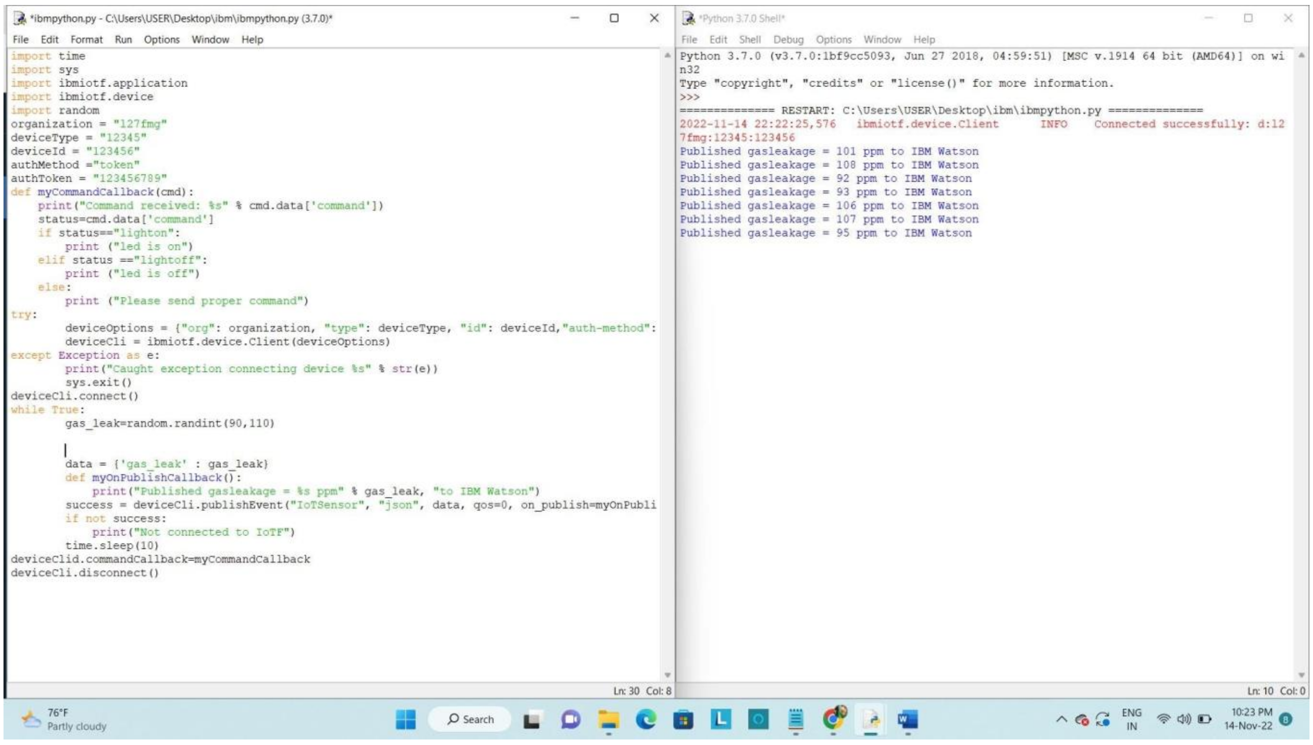
PUBLISH DATA TO PYTHON CODE

Date	17 November 2022
Team ID	PNT2022TMID53681
Project Name	Gas Leakage Monitoring & Alerting System for Industries
Maximum Marks	4 Marks

<u>Gas Leakage Monitoring & Alerting System for Industries</u>

Python code :

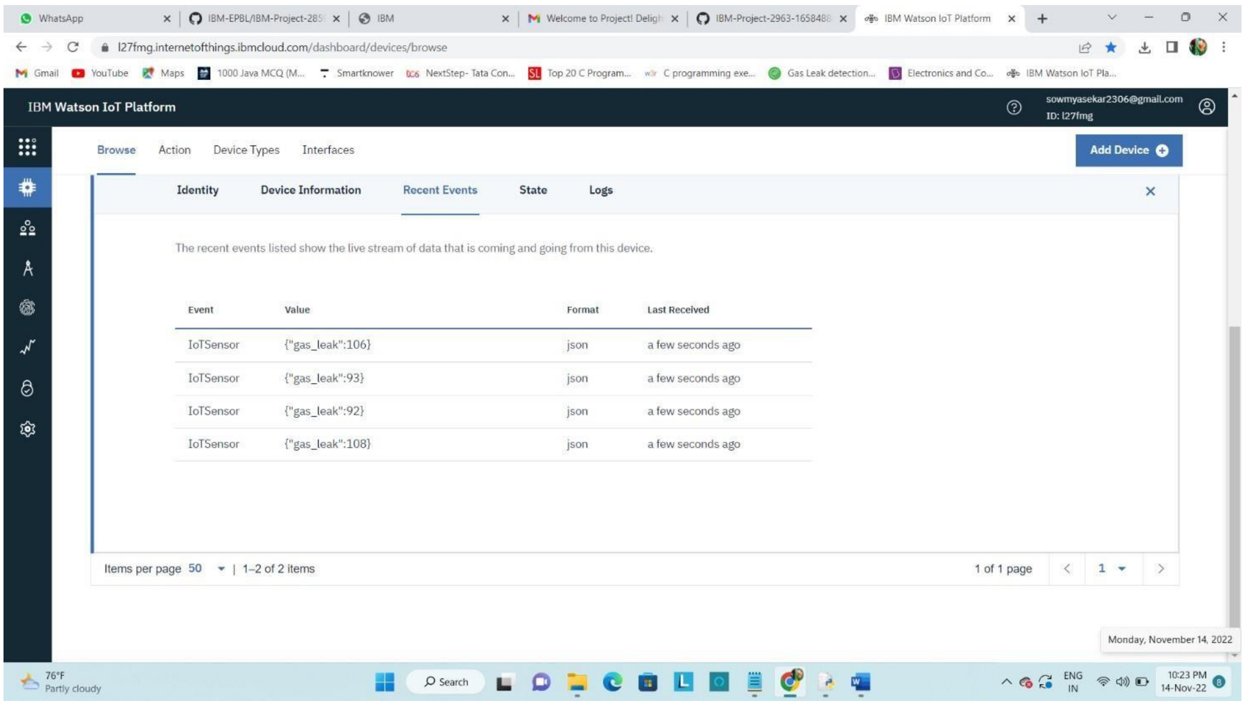

ibmpython.py - C:\Users\USER\Desktop\ibm\ibmpython.py (3.7.0)
File Edit Format Run Options Window Help
Ln: 30 Col: 8
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Ln: 10 Col: 0
76°F
Partly cloudy
Search
ENG
IN
10:23 PM
14-Nov-22

```python
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
organization = "127fmg"
deviceType = "12345"
deviceId = "123456"
authMethod ="token"
authToken = "123456789"
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":
        deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
        print("Caught exception connecting device %s" % str(e))
        sys.exit()
deviceCli.connect()
while True:
        gas_leak=random.randint(90,110)

        data = {'gas_leak' : gas_leak}
        def myOnPublishCallback():
            print("Published gasleakage = %s ppm" % gas_leak, "to IBM Watson")
        success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPubli
        if not success:
            print("Not connected to IoTF")
        time.sleep(10)
deviceClid.commandCallback=myCommandCallback
deviceCli.disconnect()
```

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on wi
n32
Type "copyright", "credits" or "license()" for more information.
>>>
============== RESTART: C:\Users\USER\Desktop\ibm\ibmpython.py ==============
2022-11-14 22:22:25,576   ibmiotf.device.Client      INFO    Connected successfully: d:12
7fmg:12345:123456
Published gasleakage = 101 ppm to IBM Watson
Published gasleakage = 108 ppm to IBM Watson
Published gasleakage = 92 ppm to IBM Watson
Published gasleakage = 93 ppm to IBM Watson
Published gasleakage = 106 ppm to IBM Watson
Published gasleakage = 107 ppm to IBM Watson
Published gasleakage = 95 ppm to IBM Watson
```

IBM Watson Connection :



IBM Watson IoT Platform

Browse | Action | Device Types | Interfaces

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	{"gas_leak":106}	json	a few seconds ago
IoTSensor	{"gas_leak":93}	json	a few seconds ago
IoTSensor	{"gas_leak":92}	json	a few seconds ago
IoTSensor	{"gas_leak":108}	json	a few seconds ago

Items per page 50 | 1–2 of 2 items   1 of 1 page

l27fmg.internetofthings.ibmcloud.com/dashboard/devices/browse
sowmyasekar2306@gmail.com
ID: l27fmg
Add Device
Monday, November 14, 2022
10:23 PM
14-Nov-22