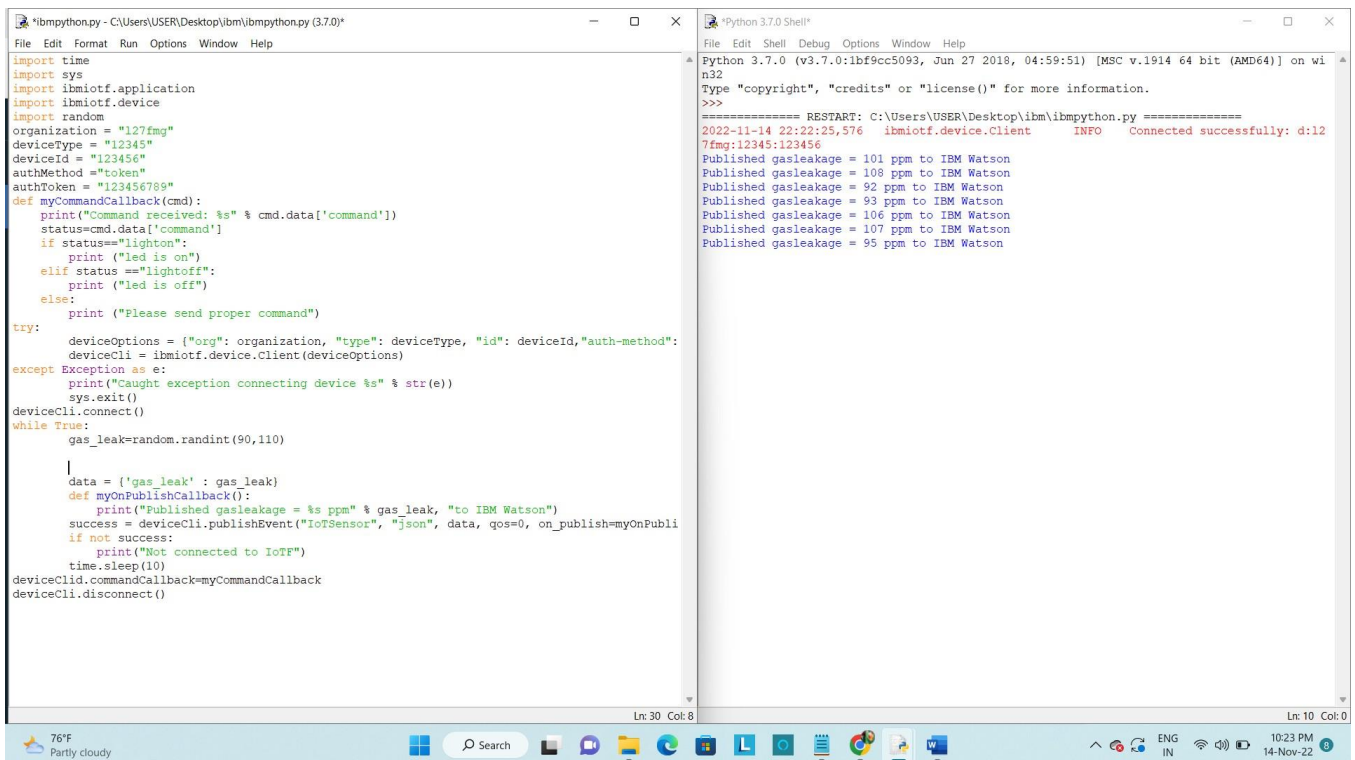


## PUBLISH DATA TO PYTHON CODE

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

### Gas Leakage Monitoring & Alerting System for Industries

Python code :



```
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
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

ibmpython.py - C:\Users\USER\Desktop\ibm\ibmpython.py (3.7.0)*
File Edit Format Run Options Window Help
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 IoT")
        time.sleep(10)
deviceCliid.commandCallback=myCommandCallback
deviceCli.disconnect()
```

### IBM Watson Connection :

The screenshot displays the IBM Watson IoT Platform dashboard. The top navigation bar includes a search icon, a user profile icon, and the text "sowmyasekar2306@gmail.com ID: l27fmg". The main content area is titled "Recent Events" and shows a table of live data streams. The table has four columns: "Event", "Value", "Format", and "Last Received". The data shows four events, all related to "gas\_leak" with values "106", "93", "92", and "108". The "Format" column indicates "json" for all events, and the "Last Received" column shows "a few seconds ago" for each. The bottom of the dashboard shows "Items per page 50" and "1 of 1 page". The system tray at the bottom indicates the date and time as "Monday, November 14, 2022 10:23 PM 14-Nov-22".

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



