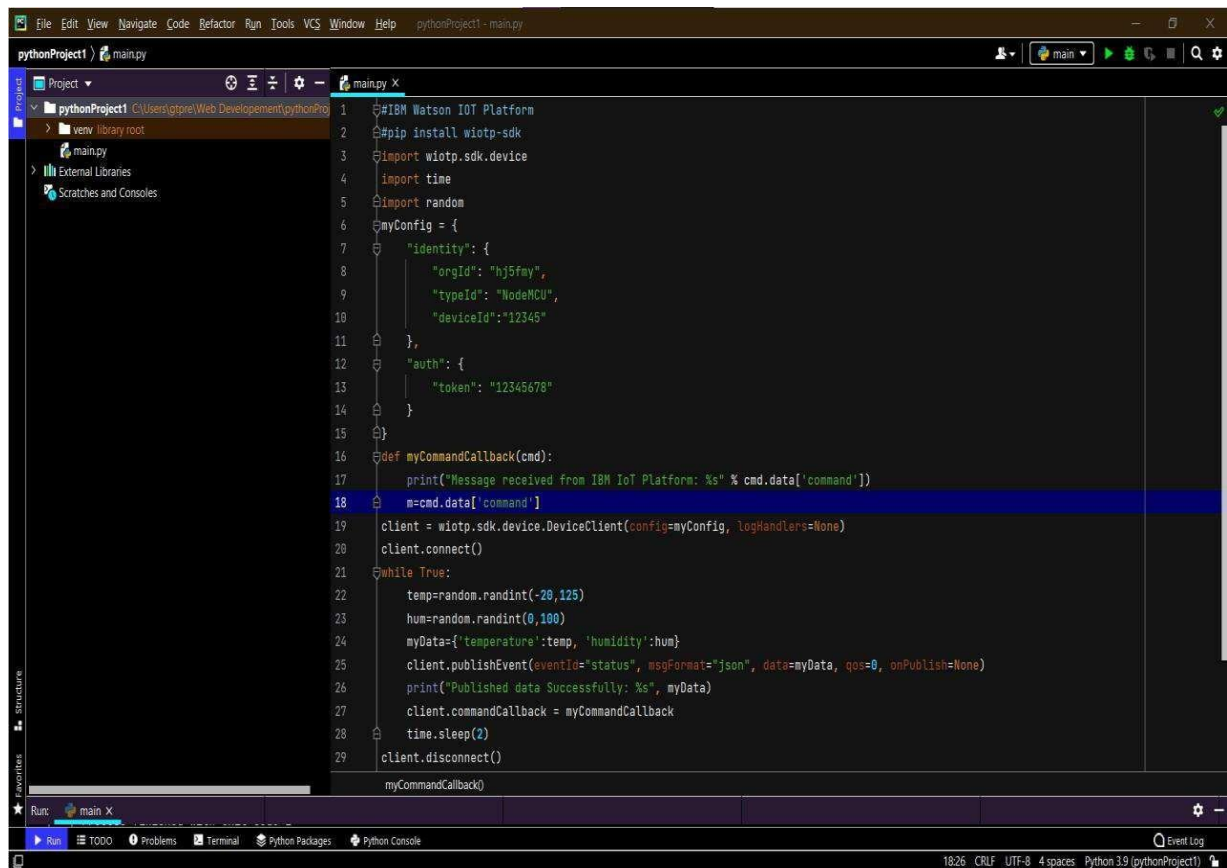


Develop a Python Script

Team Id	PNT2022TMID26034
Project Name	Hazardous area monitoring for industrial plant powered by IOT
Team Lead	Mukhul Krishna M.B
Team Member 1	Nirmal Kumar S
Team Member 2	Karrthik T
Team Member 3	Lalith Adhithyan B



The screenshot shows a Python IDE with a project named 'pythonProject1'. The file 'main.py' is open, displaying a script for connecting to the IBM Watson IoT Platform. The script includes comments for installing the 'wiotp-sdk' and importing necessary modules like 'wiotp.sdk.device', 'time', and 'random'. It defines a configuration dictionary 'myConfig' with fields for 'identity' (orgId, typeId, deviceId) and 'auth' (token). A function 'myCommandCallback' is defined to handle incoming commands. The main logic consists of a 'while True' loop that generates random temperature and humidity data, publishes it to the IoT platform, and then disconnects and reconnects the client every 2 seconds.

```
1 #IBM Watson IoT Platform
2 #pip install wiotp-sdk
3 import wiotp.sdk.device
4 import time
5 import random
6 myConfig = {
7     "identity": {
8         "orgId": "hj5fmy",
9         "typeId": "NodeMCU",
10        "deviceId": "12345"
11    },
12    "auth": {
13        "token": "12345678"
14    }
15 }
16 def myCommandCallback(cmd):
17     print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
18     m=cmd.data['command']
19     client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
20     client.connect()
21     while True:
22         temp=random.randint(-20,125)
23         hum=random.randint(0,100)
24         myData={'temperature':temp, 'humidity':hum}
25         client.publishEvent(eventId='status', msgFormat='json', data=myData, qos=0, onPublish=None)
26         print("Published data Successfully: %s", myData)
27         client.commandCallback = myCommandCallback
28         time.sleep(2)
29     client.disconnect()
30 myCommandCallback()
```