# Sprint – 2
# Team ID: PNT2022TMID40473

CODE:

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
from geopy.geocoders import Nominatim
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "4ipem5",
        "typeId": "PNT2022MID40473",
        "deviceId":"1234"
    },
    "auth": {
        "token": "8072679097"
    }
}

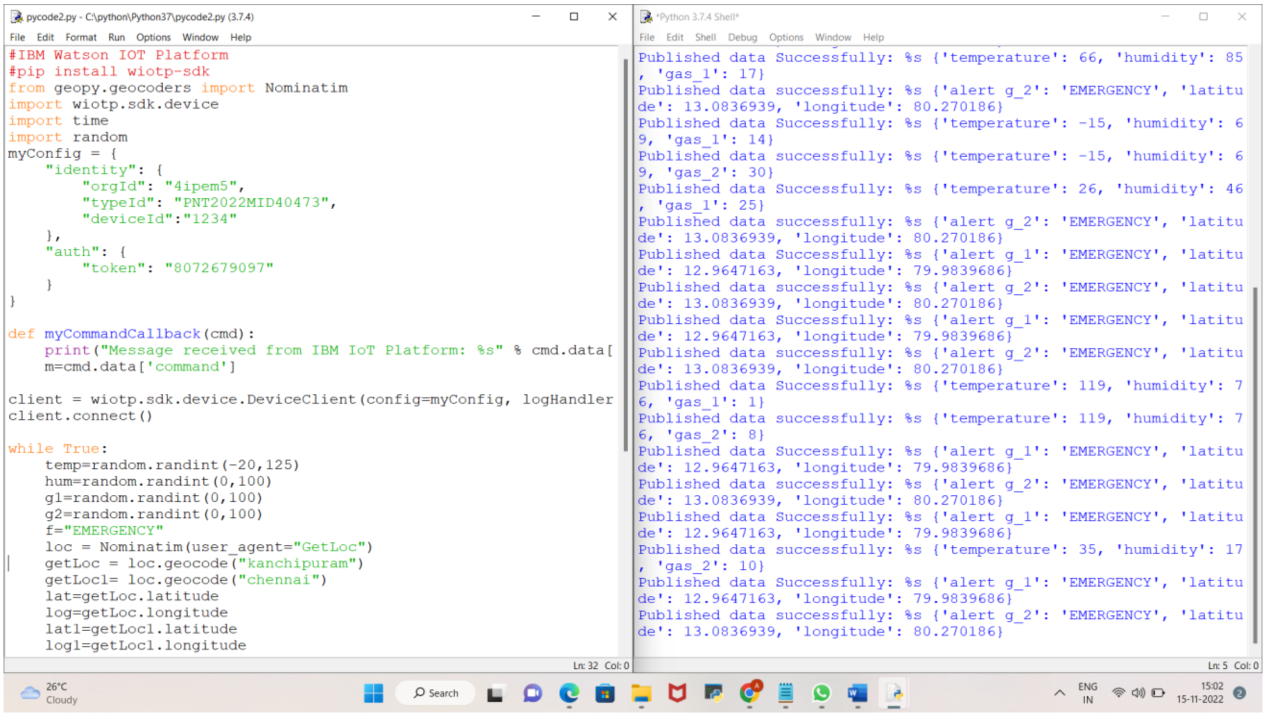
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    g1=random.randint(0,100)
    g2=random.randint(0,100)
    f="EMERGENCY"
    loc = Nominatim(user_agent="GetLoc")
    getLoc = loc.geocode("kanchipuram")
    getLoc1= loc.geocode("chennai")
    lat=getLoc.latitude
    log=getLoc.longitude
    lat1=getLoc1.latitude
    log1=getLoc1.longitude

    myData={'temperature':temp, 'humidity':hum,'gas_1':g1}
    if g1 > 40:
        myData={'alert g_1':f,'latitude':lat,'longitude':log}
    else:
        myData={'temperature':temp, 'humidity':hum,'gas_1':g1}
    if g2 > 40:
        myData1={'alert g_2':f,'latitude':lat1,'longitude':log1}
    else:
        myData1={'temperature':temp, 'humidity':hum,'gas_2':g2}

    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
    client.publishEvent(eventId="status", msgFormat="json", data=myData1, qos=0,
onPublish=None)
    print("Published data Successfully: %s", myData)
    print("Published data successfully: %s", myData1)
    client.commandCallback = myCommandCallback
    time.sleep(3)
client.disconnect()
```


pycode2.py - C:\python\Python37\pycode2.py (3.7.4)
File Edit Format Run Options Window Help
Ln: 32 Col: 0
*Python 3.7.4 Shell*
File Edit Shell Debug Options Window Help
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26°C
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ENG
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15:02
15-11-2022

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import wiotp.sdk.device
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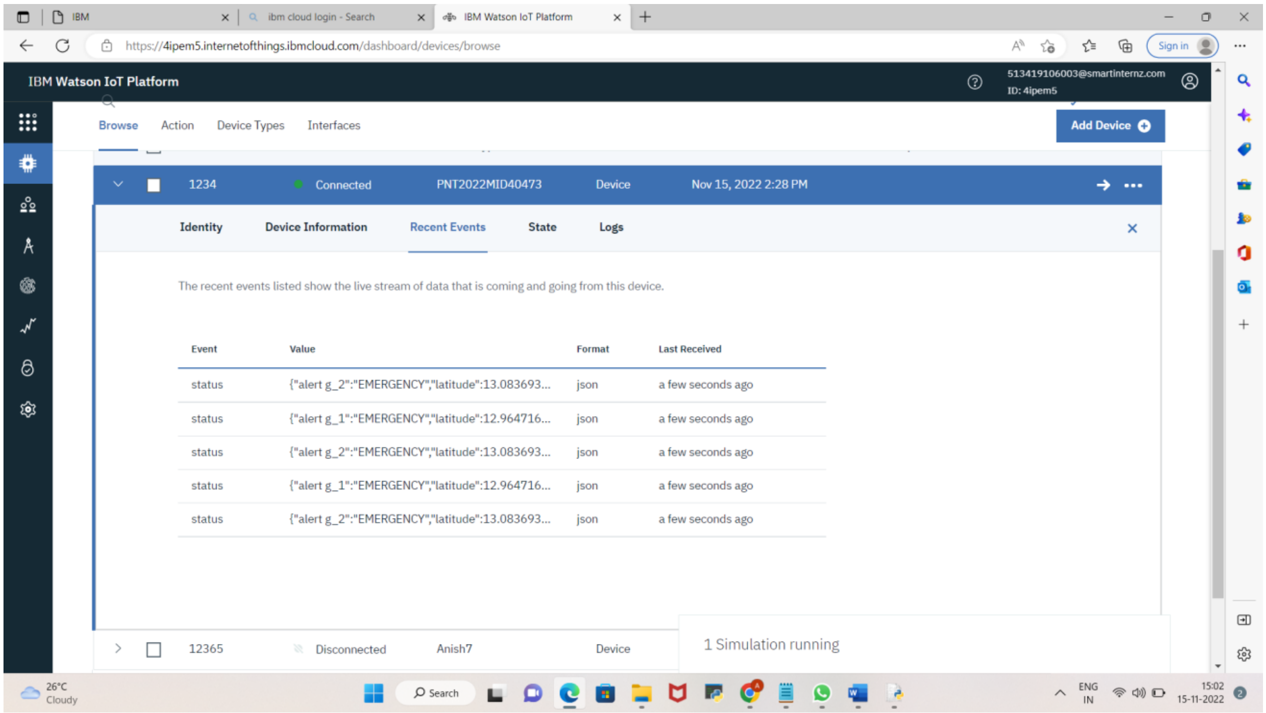
    "auth": {
        "token": "8072679097"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data[
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandler
client.connect()

while True:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    g1=random.randint(0,100)
    g2=random.randint(0,100)
    f="EMERGENCY"
    loc = Nominatim(user_agent="GetLoc")
    getLoc = loc.geocode("kanchipuram")
    getLoc1= loc.geocode("chennai")
    lat=getLoc.latitude
    log=getLoc.longitude
    lat1=getLoc1.latitude
    log1=getLoc1.longitude
```

```
Published data Successfully: %s {'temperature': 66, 'humidity': 85
, 'gas_1': 17}
Published data successfully: %s {'alert g_2': 'EMERGENCY', 'latitu
de': 13.0836939, 'longitude': 80.270186}
Published data Successfully: %s {'temperature': -15, 'humidity': 6
9, 'gas_1': 14}
Published data successfully: %s {'temperature': -15, 'humidity': 6
9, 'gas_2': 30}
Published data Successfully: %s {'temperature': 26, 'humidity': 46
, 'gas_1': 25}
Published data successfully: %s {'alert g_2': 'EMERGENCY', 'latitu
de': 13.0836939, 'longitude': 80.270186}
Published data Successfully: %s {'alert g_1': 'EMERGENCY', 'latitu
de': 12.9647163, 'longitude': 79.9839686}
Published data successfully: %s {'alert g_2': 'EMERGENCY', 'latitu
de': 13.0836939, 'longitude': 80.270186}
Published data Successfully: %s {'alert g_1': 'EMERGENCY', 'latitu
de': 12.9647163, 'longitude': 79.9839686}
Published data successfully: %s {'alert g_2': 'EMERGENCY', 'latitu
de': 13.0836939, 'longitude': 80.270186}
Published data Successfully: %s {'temperature': 119, 'humidity': 7
6, 'gas_1': 1}
Published data successfully: %s {'temperature': 119, 'humidity': 7
6, 'gas_2': 8}
Published data Successfully: %s {'alert g_1': 'EMERGENCY', 'latitu
de': 12.9647163, 'longitude': 79.9839686}
Published data successfully: %s {'alert g_2': 'EMERGENCY', 'latitu
de': 13.0836939, 'longitude': 80.270186}
Published data Successfully: %s {'alert g_1': 'EMERGENCY', 'latitu
de': 12.9647163, 'longitude': 79.9839686}
Published data successfully: %s {'temperature': 35, 'humidity': 17
, 'gas_2': 10}
Published data Successfully: %s {'alert g_1': 'EMERGENCY', 'latitu
de': 12.9647163, 'longitude': 79.9839686}
Published data successfully: %s {'alert g_2': 'EMERGENCY', 'latitu
de': 13.0836939, 'longitude': 80.270186}
```



1234 ● Connected PNT2022MID40473 Device Nov 15, 2022 2:28 PM

The recent events listed show the live stream of data that is coming and going from this device.

| Event | Value | Format | Last Received |
|---|---|---|---|
| status | {"alert g_2":"EMERGENCY","latitude":13.083693... | json | a few seconds ago |
| status | {"alert g_1":"EMERGENCY","latitude":12.964716... | json | a few seconds ago |
| status | {"alert g_2":"EMERGENCY","latitude":13.083693... | json | a few seconds ago |
| status | {"alert g_1":"EMERGENCY","latitude":12.964716... | json | a few seconds ago |
| status | {"alert g_2":"EMERGENCY","latitude":13.083693... | json | a few seconds ago |

12365 Disconnected Anish7 Device

1 Simulation running