

## SPRINT 1[2]

### Local/Software run

Team ID	PNT2022TMID52810
Project Name	Project - Signs with smart connectivity for Better road safety

Develop the Python code in which the test cases are provided like Weather, School timings

### **PYTHON SCRIPT:**

```
import wiotp.sdk.device
import time
import random
import requests,json
import datetime
myConfig = {
    "identity": {
        "orgId": "tmwrsv",
        "typeId": "Sprint",
        "deviceId": "sprint12"
    },
    "auth": {
        "token": "KxMwjzjw)BijreluFk"
    }
}
CITY = "Coimbatore"
API_KEY = "9111b726e6aa664188c5a2924f15f78e"
URL=
"https://api.openweathermap.org/data/2.5/weather?q=Coimbatore,%20IN&appid=9111b726e6aa664188c5a2924f15f78e"
response = requests.get(URL)
if response.status_code == 200:
    data = response.json()
    main = data['main']
    temp = round(main['temp'] - 273,2)
    humy = main['humidity']
    pres = main['pressure']
    rept = data['weather']
    report = rept[0]['description']
    time = datetime.datetime.now()
    morning = time.replace(hour=11, minute=59, second=0, microsecond=0)
    if time <= morning:
        me = '8.30 AM - 9.30 AM'
    else:
        me = '3.45 PM - 5.00 PM'
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
```

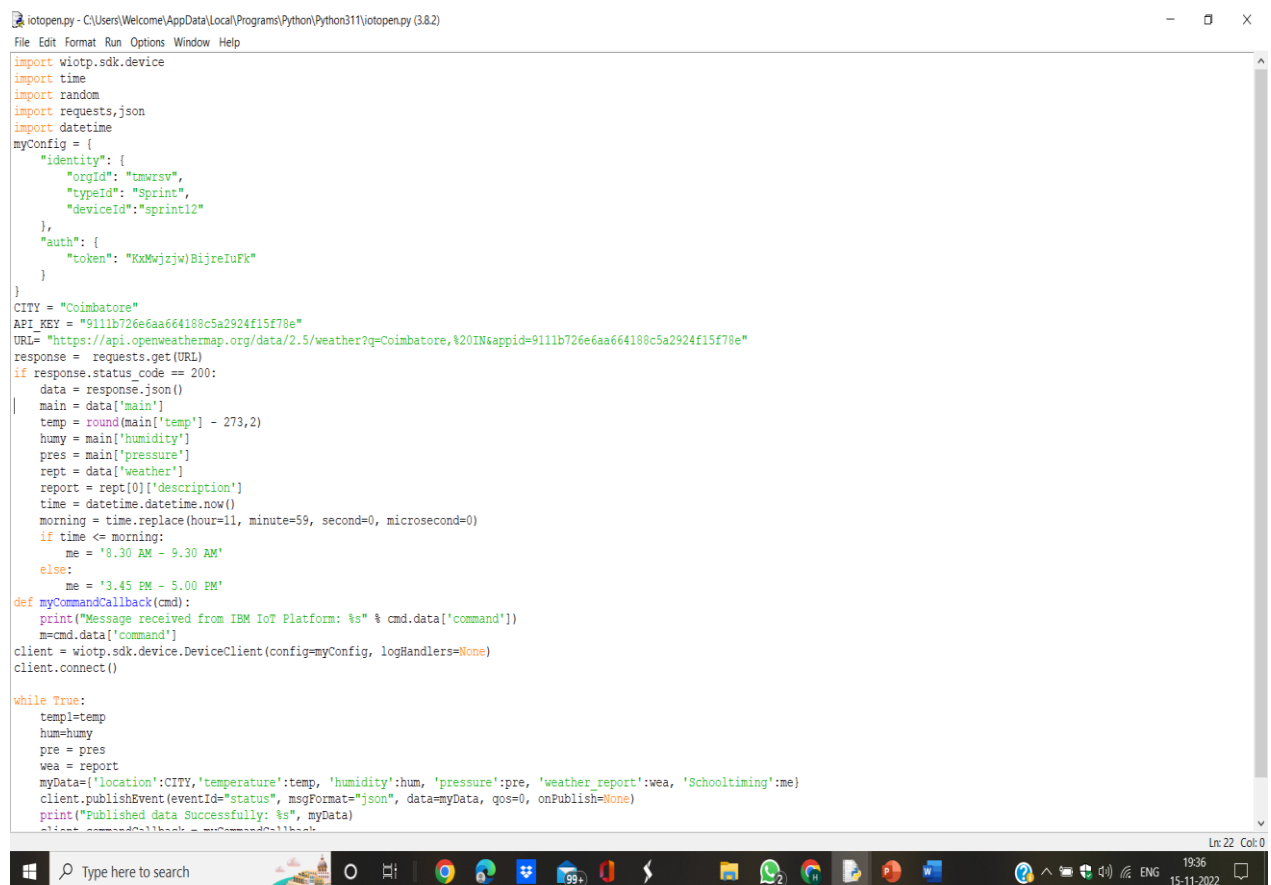
```

    m=cmd.data['command']
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    temp1=temp
    hum=humy
    pre = pres
    wea = report
    myData={'location':CITY,'temperature':temp, 'humidity':hum, 'pressure':pre,
'weather_report':wea, 'Schooltiming':me}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
client.disconnect()

```

## **PYTHON IDE:**



The screenshot shows a Python IDE window titled "iotopen.py - C:\Users\Welcome\AppData\Local\Programs\Python\Python311\iotopen.py (3.8.2)". The script defines a configuration object, fetches weather data from an API, and publishes it to an IBM IoT Platform. It includes a command callback function and a main loop that publishes data every 59 seconds.

```

iotopen.py - C:\Users\Welcome\AppData\Local\Programs\Python\Python311\iotopen.py (3.8.2)
File Edit Format Run Options Window Help
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CITY = "Coimbatore"
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    m=cmd.data['command']
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client.connect()

while True:
    temp1=temp
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    myData={'location':CITY,'temperature':temp, 'humidity':hum, 'pressure':pre, 'weather_report':wea, 'Schooltiming':me}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback

```

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### PYTHON IDE OUTPUT:

[illegible]