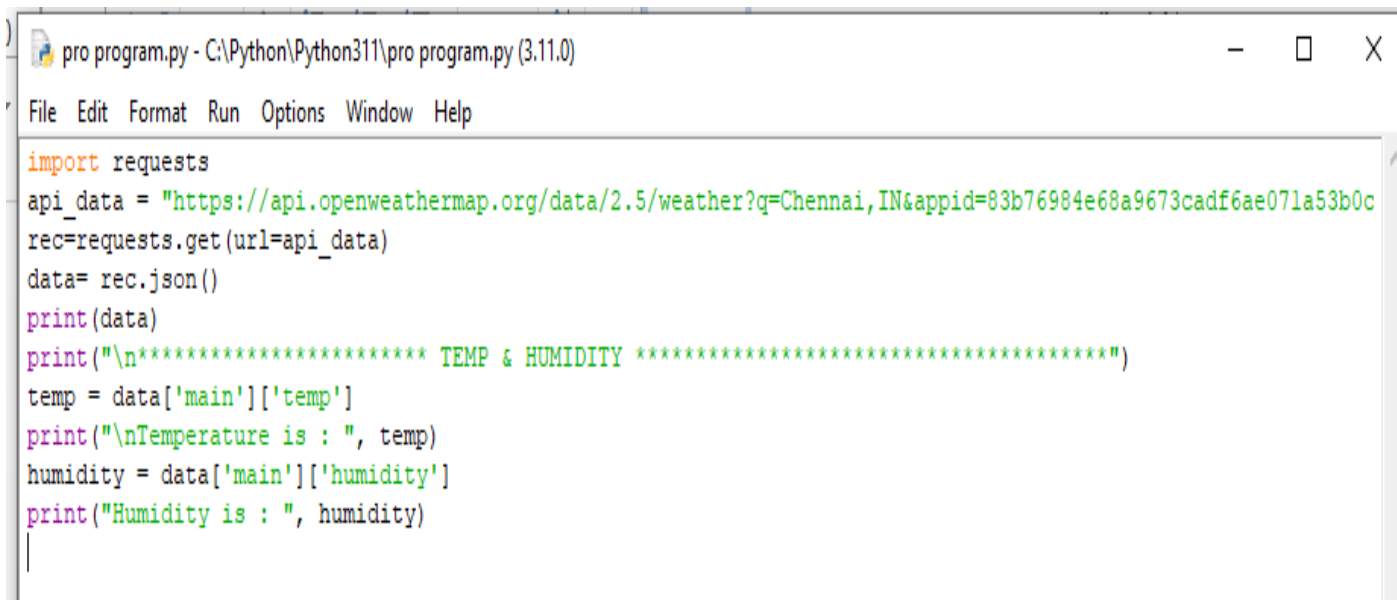


# SPRINT – 02

Date :	02 November 2022
Team ID :	PNT2022TMID37707
Project Name	SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

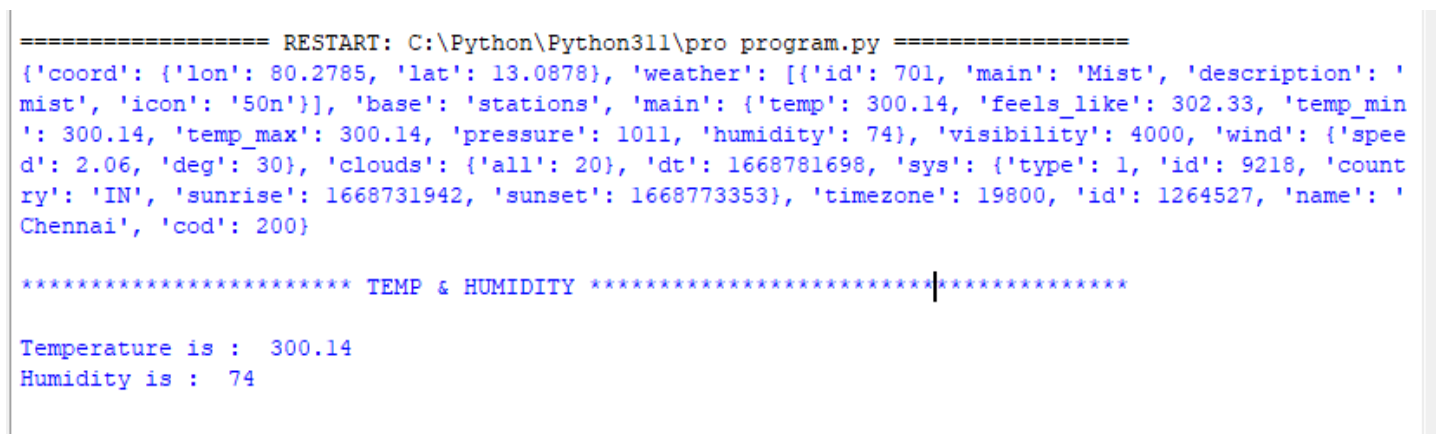
## Sprint goal:

Push the code from Sprint 1 to cloud so it can be accessed from anywhere



```
pro program.py - C:\Python\Python311\pro program.py (3.11.0)
File Edit Format Run Options Window Help
import requests
api_data = "https://api.openweathermap.org/data/2.5/weather?q=Chennai,IN&appid=83b76984e68a9673cadf6ae071a53b0c"
rec=requests.get(url=api_data)
data= rec.json()
print(data)
print("\n***** TEMP & HUMIDITY *****")
temp = data['main']['temp']
print("\nTemperature is : ", temp)
humidity = data['main']['humidity']
print("Humidity is : ", humidity)
```

## OUTPUT :



```
===== RESTART: C:\Python\Python311\pro program.py =====
{'coord': {'lon': 80.2785, 'lat': 13.0878}, 'weather': [{'id': 701, 'main': 'Mist', 'description': 'mist', 'icon': '50n'}], 'base': 'stations', 'main': {'temp': 300.14, 'feels_like': 302.33, 'temp_min': 300.14, 'temp_max': 300.14, 'pressure': 1011, 'humidity': 74}, 'visibility': 4000, 'wind': {'speed': 2.06, 'deg': 30}, 'clouds': {'all': 20}, 'dt': 1668781698, 'sys': {'type': 1, 'id': 9218, 'country': 'IN', 'sunrise': 1668731942, 'sunset': 1668773353}, 'timezone': 19800, 'id': 1264527, 'name': 'Chennai', 'cod': 200}

***** TEMP & HUMIDITY *****
Temperature is : 300.14
Humidity is : 74
```

## PYTHON CODE

```
import requests

api_data =
"https://api.openweathermap.org/data/2.5/weather?q=Chennai,IN&appid=83b76984e68a9673cadf6ae071a53b0c"

rec=requests.get(url=api_data)

data= rec.json()

print(data)

temp = data['main']['temp']

print("\nTemperature is : ", temp)

humidity = data['main']['humidity']

print("Humidity is : ", humidity)
```

## ii) PYTHON CODE TO IBM CLOUD



```
hi.py - C:\Python\Python311\hi.py (3.11.0)
File Edit Format Run Options Window Help

#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "7kb3es",
        "typeId": "deepi_reshpeery",
        "deviceId": "56789"
    },
    "auth": {
        "token": "CUsp45PBuBEsQeJ_9N"
    }
}

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)
    myData={'temperature':temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The 'Recent Events' tab is selected, displaying a table of live data streams. The table has columns for 'Event', 'Value', 'Format', and 'Last Received'. The data shows five events, each with a unique 'event\_1' ID and a JSON value containing temperature and humidity data.

Event	Value	Format	Last Received
event_1	{"temperature":71,"humidity":2}	json	a few seconds ago
event_1	{"temperature":18,"humidity":15}	json	a few seconds ago
event_1	{"temperature":19,"humidity":31}	json	a few seconds ago
event_1	{"temperature":95,"humidity":48}	json	a few seconds ago
event_1	{"temperature":90,"humidity":2}	json	a few seconds ago

## PYTHON CODE:

#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time

import random

myConfig = {

    "identity": {

        "orgId": "7kb3es",

        "typeId": "deepi\_reshepeery",

        "deviceId": "56789"

    },

    "auth": {

        "token": "CUsp45PBuBEsQeJ\_9N"

```
}  
}
```

```
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)
```

```
    myData={'temperature':temp, 'humidity':hum}
```

```
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
```

```
    print("Published data Successfully: %s", myData)
```

```
    client.commandCallback = myCommandCallback
```

```
    time.sleep(2)
```

```
client.disconnect()
```

**THANK YOU..!!**