

DEVELOP A PYTHON SCRIPT

<u>Date</u>	09 November 2022
<u>Team ID</u>	PNT2022TMID00948
<u>Project Name</u>	Project - Signs with smart connectivity for Better road safety

Signs with smart connectivity for Better road safety:

Create a code snippet using python to

1. Extract weather data from OpenWeatherMap using APIs
2. Send the extracted data to the cloud
3. Receive data from the cloud and view it in the python compiler

The screenshot shows a web browser window with multiple tabs. The active tab is 'openweathermap.org/api'. The page title is 'Weather API'. The main content area features a 'One Call API 3.0 NEW' section. It includes a 'Subscribe' button and a list of features: Minute forecast for 1 hour, Hourly forecast for 48 hours, Daily forecast for 8 days, Historical data for 40+ years back by timestamp, and National weather alerts. The pricing is listed as '1,000 API calls per day for free' and '0.0012 GBP per API call over the daily limit'. A 'Subscribe to One Call by Call' button is also present. The footer shows the current weather as '26°C Partly cloudy' and the system clock as '22:48 09-11-2022'.

Weather API

Please, [sign up](#) to use our fast and easy-to-work weather APIs. As a start to use OpenWeather products, we recommend our [One Call API 3.0](#). For more functionality, please consider our products, which are included in [professional collections](#).

One Call API 3.0 **NEW**

[API doc](#) [Subscribe](#)

Make one API call and receive all essential weather data in one response:

- Minute forecast for 1 hour
- Hourly forecast for 48 hours
- Daily forecast for 8 days
- Historical data for 40+ years back by timestamp
- National weather alerts

Read more about this API and subscription plan in the [FAQ](#).

Pay as you call

1,000 API calls per day for free
0.0012 GBP per API call over the daily limit

[Subscribe to One Call by Call](#)

This is a separate subscription plan, which include only One Call API.

IBM | IBM-Project-4 | Node-RED : no | IBM Watson Io | Node-RED Da | Download file | Find - OpenWi |

openweathermap.org/find?utf8=✓&q=chennai

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OpenWeather

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Weather in your city

chennai Search

Chennai, IN mist

27°C temperature from 27 to 27 °C, wind 1.54 m/s, clouds 40 %, 1012 hpa

Geo coords [13.0878, 80.2785]

Search engine is very flexible. How it works:

Publish Data to t...docx | Develop a python...docx | Publish Data to th...pdf | Develop a python...pdf | Show all

27°C Partly cloudy

ENG IN 22:44 09-11-2022

weathermap.py - C:\Users\pre\weathermap.py (3.0.0.2)

File Edit Format Run Options Window Help

```
import requests
a = "https://api.openweathermap.org/data/2.5/weather?q=Chennai,IN&appid=6d13d12f9cd34a07871a5795d01e2c47"
r = requests.get(url = a)
data = r.json()
print(r)
print(data)
temp = data["main"]["temp"]
hum = data["main"]["humidity"]
print("Temperature is : ",temp)
print("Humidity is : ",hum)
```

Python 3.6.5 Shell

File Edit Shell Debug Options Window Help

```
<Response [200]>
Temperature is : 298.14
>>>
===== RESTART: E:\IBM\pre\weatherMap.py =====
=====
<Response [200]>
{'coord': {'lon': 80.2785, 'lat': 13.0878}, 'weather': [{'id': 701, 'main': 'Mist', 'description': 'mist', 'icon': '50n'}, {'id': 500, 'main': 'Rain', 'description': 'light rain', 'icon': '10n'}], 'base': 'stations', 'main': {'temp': 298.14, 'feels_like': 299.15, 'temp_min': 298.14, 'temp_max': 298.14, 'pressure': 1012, 'humidity': 94}, 'visibility': 2500, 'wind': {'speed': 1.54, 'deg': 350}, 'rain': {'1h': 0.12}, 'clouds': {'all': 75}, 'dt': 1667317416, 'sys': {'type': 1, 'id': 9218, 'country': 'IN', 'sunrise': 1667262751, 'sunset': 1667304738}, 'timezone': 19800, 'id': 1264527, 'name': 'Chennai', 'cod': 200}
Temperature is : 298.14
Humidity is : 94
>>>
```

Ln: 17 Col: 4