

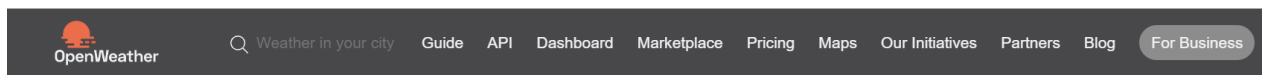
## Develop a Python script

Date	31 October 2022
Team ID	PNT2022TMID52873
Project Name	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



## Weather API

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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 <sup>NEW</sup>

[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

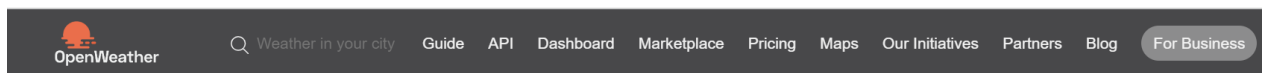
Read more about this API and subscription plan in the [FAQ](#).

Pay as you call

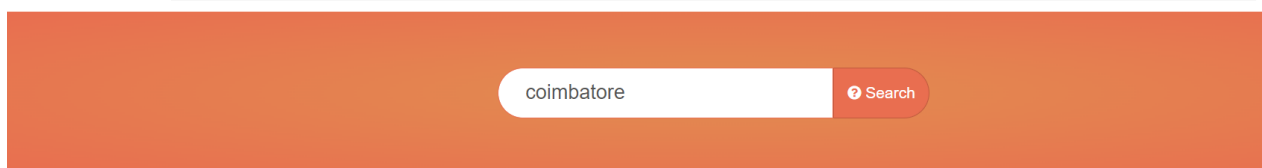
**1,000 API calls per day for free**  
**0.0012 GBP** per API call over the daily limit

[Subscribe to One Call by Call](#)

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



## Weather in your city



Coimbatore, IN 🇮🇳 moderate rain

**22.9°C** temperature from 22.9 to 23.6 °C, wind 4.63 m/s, clouds 100 %, 1015 hpa

Geo coords [\[11, 76.9667\]](#)

```

*test 1.py - C:\Users\viswa\OneDrive\Documents\ibm\py\weather\test 1.py (3.10.7)*
File Edit Format Run Options Window Help
import requests, json
BASE_URL = "https://api.openweathermap.org/data/2.5/weather?"
CITY = "Hyderabad"
API_KEY = "46faa4ab6fedeld9ae549b90d91253f2"
# upadting the URL
URL = BASE_URL + "q=" + CITY + "&appid=" + API_KEY
# HTTP request
response = requests.get(URL)
# checking the status code of the request
if response.status_code == 200:
    # getting data in the json format
    data = response.json()
    # getting the main dict block
    main = data['main']
    # getting temperature
    temperature = main['temp']
    # getting the humidity
    humidity = main['humidity']
    # getting the pressure
    pressure = main['pressure']
    # weather report
    report = data['weather']
    print(f"{CITY:-^30}")
    print(f"Temperature: {temperature}")
    print(f"Humidity: {humidity}")
    print(f"Pressure: {pressure}")
    print(f"Weather Report: {report[0]['description']}")
else:
    # showing the error message
    print("Error in the HTTP request")

```

```

IDLE Shell 3.10.7
File Edit Shell Debug Options Window Help
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep  5 2022, 14:08:36) [MSC v.1933 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\viswa\OneDrive\Documents\ibm\py\weather\test 1.py =====
-----coimbatore-----
Temperature: 296.03
Humidity: 94
Pressure: 1015
Weather Report: moderate rain
>>>

```