

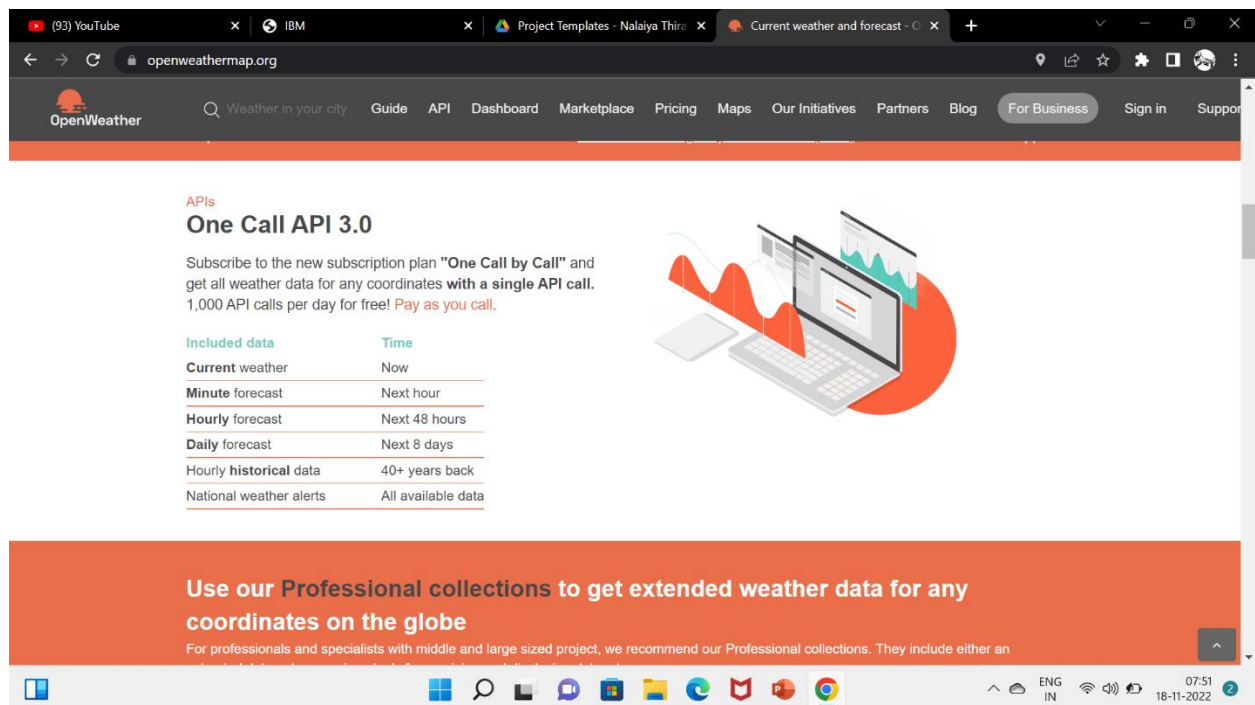
Develop a python script

Date	18 November 2022
Team	PNT2022TMID08255
Project Name	Signs with Smart Connectivity For Better Road Safety
Maximum Marks	4 Marks

Create a code snippet using python compiler

- 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

1. Extract weather data from OpenWeatherMap using APIs



The screenshot shows the OpenWeatherMap website with the following content:

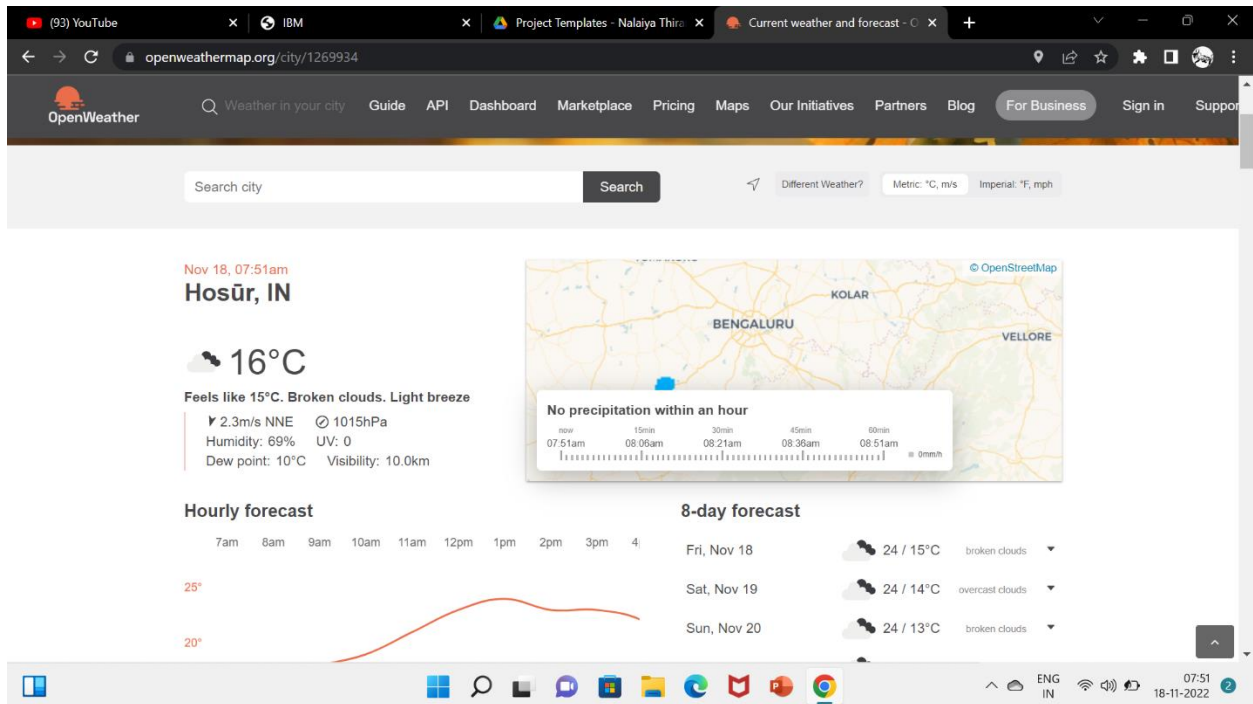
- APIs**
- One Call API 3.0**
- Subscribe to the new subscription plan "One Call by Call" and get all weather data for any coordinates **with a single API call**. 1,000 API calls per day for free! **Pay as you call**.
- Included data** and **Time** table:

Included data	Time
Current weather	Now
Minute forecast	Next hour
Hourly forecast	Next 48 hours
Daily forecast	Next 8 days
Hourly historical data	40+ years back
National weather alerts	All available data

Use our Professional collections to get extended weather data for any coordinates on the globe

For professionals and specialists with middle and large sized project, we recommend our Professional collections. They include either an

2.Send the extracted data to the cloud



3.Receive data from the cloud and view it in the python compiler

The screenshot shows the Programiz Python Online Compiler interface. The main area displays a Python script that uses the requests library to fetch weather data from the OpenWeatherMap API. The script prints the temperature and humidity. The output window on the right shows the JSON response from the API, including details like coordinates, weather conditions, and temperature/humidity values. A 'Get Started!' button is visible at the bottom right.

```
main.py
1 import requests
2 a="https://api.openweathermap.org/data/2.5/weather?q=hosur&appid=a582e813be3d057faab91d376c28b009"
3 r=requests.get(url=a)
4 data=r.json()
5 print(r)
6 print(data)
7 temp=data["main"]["temp"]
8 hum=data["main"]["humidity"]
9 print("temperature is:",temp)
10 print("humidity is:",hum)
11
12
```

```
<Response [200]>
{'coord': {'lon': 77.8167, 'lat': 12.7167}, 'weather': [{'id': 803, 'main': 'Clouds', 'description': 'broken clouds', 'icon': '04d'}], 'base': 'stations', 'main': {'temp': 300.1, 'feels_like': 300.29, 'temp_min': 300.1, 'temp_max': 300.1, 'pressure': 1011, 'humidity': 46, 'sea_level': 1011, 'grnd_level': 913}, 'visibility': 10000, 'wind': {'speed': 2.46, 'deg': 85, 'gust': 2.47}, 'clouds': {'all': 80}, 'dt': 1668766588, 'sys': {'type': 1, 'id': 9205, 'country': 'IN', 'sunrise': 1668732500, 'sunset': 1668773976}, 'timezone': 19800, 'id': 1269934, 'name': 'Hosūr', 'cod': 200}
temperature is: 300.1
humidity is: 46
```