

## **BUILD A WEATHER CHECKING APPLICATION USING PYTHON**

- First, import the necessary dependencies, including the 'requests' library, which is required to fetch data.
- You can use it to retrieve data in a more structured format or directly from the API page.
- Import the 'requests' library.
- Prompt the user for the city input.
- Create a URL for the OpenWeatherMap API. Send an HTTP request to fetch data from the OpenWeatherMap API in your Python script.

(For example:

`'https://api.openweathermap.org/data/2.5/weather?q={}&appid=c8c1b2dd7998a81d7c2c627ff24a0bed&units=metric'`)

- Parse the received data, which is in JSON format and resembles a Python dictionary.
- Extract individual elements from this data.

### **SOURCE CODE:**

```
import requests

from pprint import pprint

city = input('Enter your city: ')

url =
'https://api.openweathermap.org/data/2.5/weather?q={}&appid=c8c1b2dd7998a81
d7c2c627ff24a0bed&units=metric'.format(city)
res = requests.get(url)

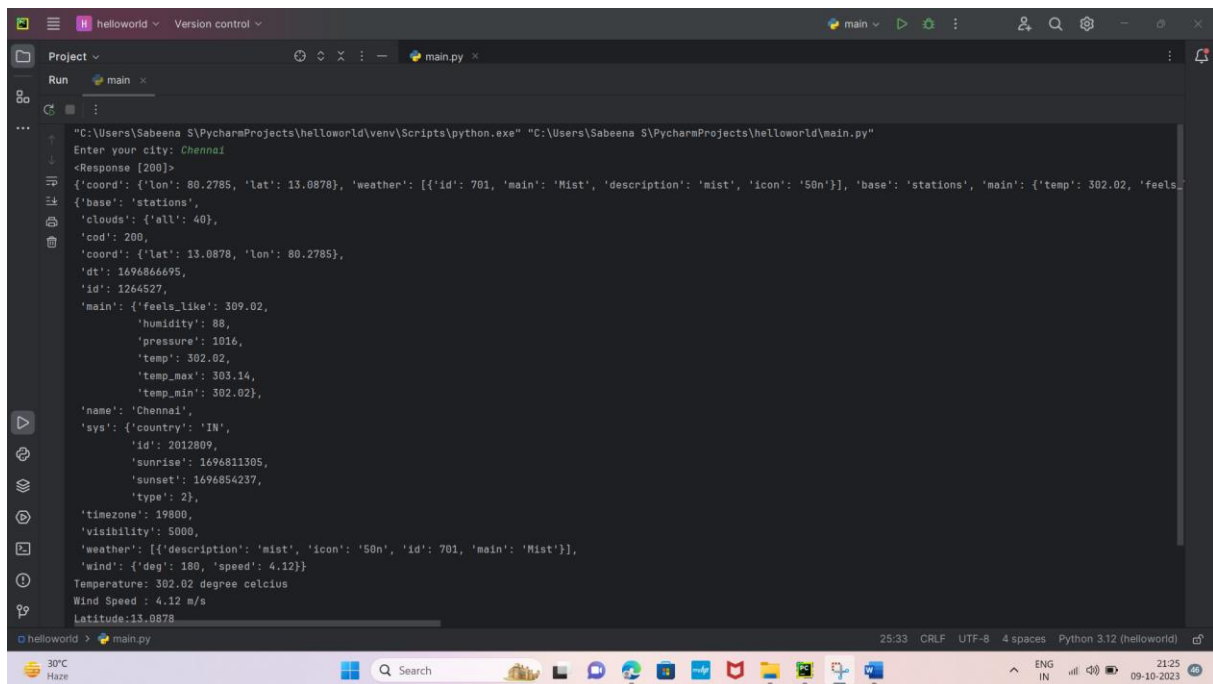
data = res.json()
print(res)
print(data)
pprint(data)

temp = data['main']['temp']
wind_speed = data['wind']['speed']
latitude = data['coord']['lat']
longitude = data['coord']['lon']
description = data['weather'][0]['description']

print('Temperature: {} degree celcius'.format(temp))
```

```
print('Wind Speed : {} m/s'.format(wind_speed))
print('Latitude:{}'.format(latitude))
print('Longitude:{}'.format(longitude))
print('Description:{}'.format(description))
```

## Output:



```
"C:\Users\Sabeena S\PycharmProjects\helloworld\venv\Scripts\python.exe" "C:\Users\Sabeena S\PycharmProjects\helloworld\main.py"
Enter your city: Chennai
<Response [200]>
{'coord': {'lon': 80.2785, 'lat': 13.0878}, 'weather': [{'id': 701, 'main': 'Mist', 'description': 'mist', 'icon': '50n'}], 'base': 'stations',
'clouds': {'all': 40},
'cod': 200,
'coord': {'lat': 13.0878, 'lon': 80.2785},
'dt': 1696866695,
'id': 1264527,
'main': {'feels_like': 309.02,
'humidity': 88,
'pressure': 1016,
'temp': 302.02,
'temp_max': 303.14,
'temp_min': 302.02},
'name': 'Chennai',
'sys': {'country': 'IN',
'id': 2012809,
'sunrise': 1696811305,
'sunset': 1696854237,
'type': 2},
'timezone': 19800,
'visibility': 5000,
'weather': [{'description': 'mist', 'icon': '50n', 'id': 701, 'main': 'Mist'}],
'wind': {'deg': 180, 'speed': 4.12}}
Temperature: 302.02 degree celcius
Wind Speed : 4.12 m/s
Latitude:13.0878
```