

DEVELOP THE PYTHON SCRIPT

Team ID	PNT2022TMID30708
Project Name	Signs With Smart Connectivity for Better Road Safety

Create a code snippet using python to

- Extract weather data from OpenWeatherMap using APIs
- Send the extracted data to the cloud
- Receive data from the cloud and view it in the python compiler

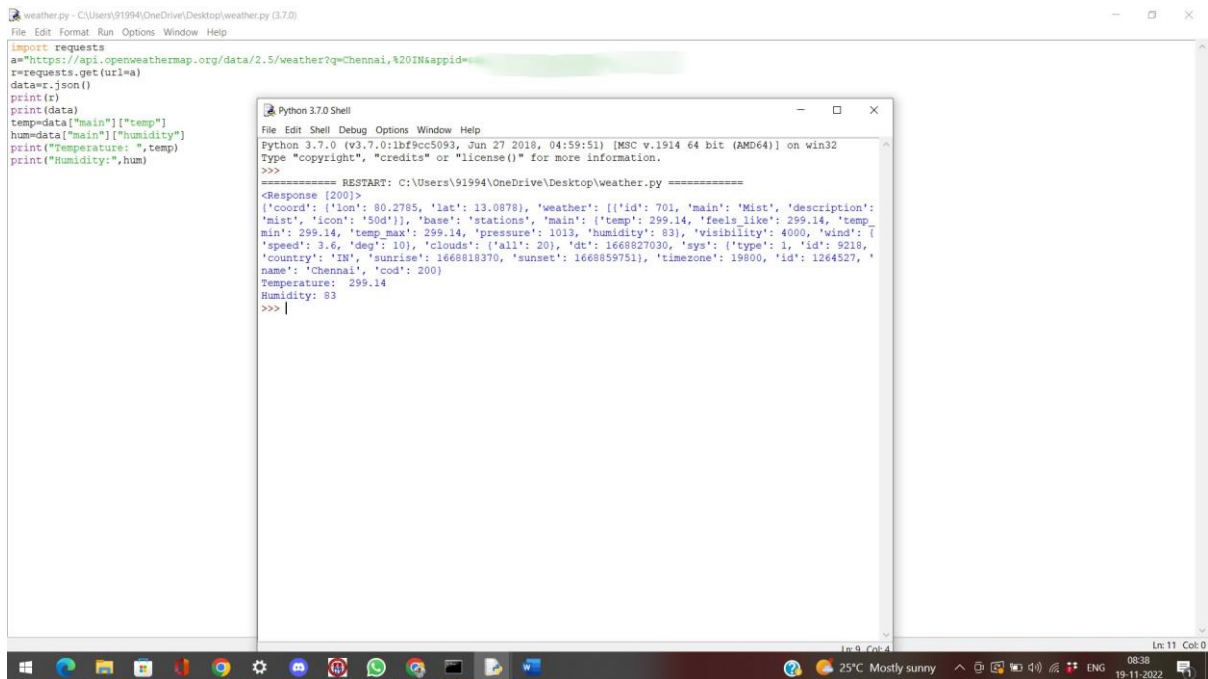
PYTHON CODE:

weather.py - C:\Users\91994\OneDrive\Desktop\weather.py (3.7.0)

File Edit Format Run Options Window Help

```
import requests
a="https://api.openweathermap.org/data/2.5/weather?q=Chennai,%20IN&appid=
r=requests.get(url=a)
data=r.json()
print(r)
print(data)
temp=data["main"]["temp"]
hum=data["main"]["humidity"]
print("Temperature: ",temp)
print("Humidity:",hum)
```

OUTPUT:



The image shows a screenshot of a Windows desktop with two windows open. The background window is a text editor titled 'weather.py - C:\Users\91994\OneDrive\Desktop\weather.py (3.7.0)'. It contains a Python script that uses the 'requests' library to fetch weather data from the OpenWeatherMap API for Chennai. The script prints the temperature and humidity. Overlaid on top of this is a 'Python 3.7.0 Shell' window. The shell shows the execution of the script, with a restart message and the printed JSON response from the API. The response includes coordinates, weather conditions (Mist), temperature (299.14 K), humidity (83%), and other meteorological data. The taskbar at the bottom shows the system clock as 08:38 on 19-11-2022, and the weather as 25°C Mostly sunny.

```
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Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\91994\OneDrive\Desktop\weather.py =====
<Response [200]>
{'coord': {'lon': 80.2785, 'lat': 13.0878}, 'weather': [{'id': 701, 'main': 'Mist', 'description':
'mist', 'icon': '50d'}], 'base': 'stations', 'main': {'temp': 299.14, 'feels_like': 299.14, 'temp_
min': 299.14, 'temp_max': 299.14, 'pressure': 1013, 'humidity': 83}, 'visibility': 4000, 'wind': {'
speed': 3.6, 'deg': 10}, 'clouds': {'all': 20}, 'dt': 1668827030, 'sys': {'type': 1, 'id': 9218,
'country': 'IN', 'sunrise': 1668818370, 'sunset': 1668859751}, 'timezone': 19800, 'id': 1264527,
name': 'Chennai', 'cod': 200}
Temperature: 299.14
Humidity: 83
>>>
```