

DEVELOP THE PYTHON SCRIPT

Team ID : PNT2022TMID11625

Project Name - SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

Create a code snippet using python to

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

1.


The screenshot shows the OpenWeatherMap API keys management interface. At the top, there's a navigation bar with the OpenWeather logo and various links like Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, Deep..., and Support. Below the navigation bar, a pink notification box states: "You have to verify your email to use OpenWeatherMap services. Please [click here](#) to get an email with the confirmation link." Below this, a horizontal menu contains links: New Products, Services, API keys (selected), Billing plans, Payments, Block logs, My orders, My profile, and Ask a question. A light blue box below the menu says: "You can generate as many API keys as needed for your subscription. We accumulate the total load from all of them." The main content area features a table of API keys and a "Create key" section. The table has columns: Key, Name, Status, and Actions. It lists two keys: one with a long alphanumeric key name, "Default", "Active" status, and a "Create key" button; and another with a shorter alphanumeric key name, "chennai", "Active" status, and a "Create key" button. The "Create key" section on the right has a text input field labeled "API key name" and a "Generate" button.

Key	Name	Status	Actions
121da254d7b328809bf6c422fd6f3623	Default	Active	Create key
83b76984e68a9673cadf6ae071a53b0c	chennai	Active	Create key

Create key

API key name [Generate](#)

2.




Weather in your city


GuideAPIDashboardMarketplacePricingMapsOur InitiativesPartnersBlogFor BusinessDeep...Support

Weather in your city

hyderabadSearch




Hyderabad, IN


 haze

28.2°C temperature from 28.2 to 28.7 °C, wind 4.12 m/s, clouds 75 %, 1017 hpa

Geo coords [17.3753, 78.4744]




Hyderabad, PK


 clear sky

32.6°C temperature from 32.6 to 32.6 °C, wind 1.69 m/s, clouds 0 %, 1016 hpa

Geo coords [25.3924, 68.3737]



Hyderabad, IN

 mist

28.1°C temperature from 27.6 to 28.1 °C, wind 4.12 m/s, clouds 40 %, 1017 hpa

3.

```
{"coord":{"lon":78.4744,"lat":17.3753},"weather":[{"id":701,"main":"Mist","description":"mist","icon":"50d"}],"base":"stations","main":{"temp":301.38,"feels_like":303.58,"temp_min":301.38,"temp_max":301.88,"pressure":1017,"humidity":65},"visibility":5000,"wind":{"speed":4.12,"deg":80},"clouds":{"all":75},"dt":1666333196,"sys":{"type":1,"id":9214,"country":"IN","sunrise":1666312830,"sunset":1666354845},"timezone":19800,"id":1269843,"name":"Hyderabad","cod":200}
```

4.

```
File Edit Format Run Options Window Help
import requests
api_data="https://api.openweathermap.org/data/2.5/weather?q=Hyderabad,IN&appid=121da254d7b328809bf6c422fd6f3623"
rec=requests.get(url=api_data)
data=rec.json()
print(data)

IDLE Shell 3.10.8
File Edit Shell Debug Options Window Help
Python 3.10.8 (tags/v3.10.8:aaaf517, Oct 11 2022, 16:50:30) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>
===== RESTART: D:/Python/Python310/cwm.py =====
{'coord': {'lon': 78.4744, 'lat': 17.3753}, 'weather': [{'id': 721, 'main': 'Haze', 'description': 'haze', 'icon': '50d'}], 'base': 'stations', 'main': {'temp': 301.38, 'feels_like': 303.07, 'temp_min': 301.38, 'temp_max': 301.88, 'pressure': 1017, 'humidity': 61}, 'visibility': 5000, 'wind': {'speed': 3.6, 'deg': 90}, 'clouds': {'all': 40}, 'dt': 1666335428, 'sys': {'type': 1, 'id': 9214, 'country': 'IN', 'sunrise': 1666312830, 'sunset': 1666354845, 'timezone': 19800, 'id': 1269843, 'name': 'Hyderabad', 'cod': 200}}
>>>
```

5.

```
["coord":{"lon":78.4744,"lat":17.3753},"weather":[{"id":701,"main":"Mist","description":"mist","icon":"50d"}],"base":"stations","main":{"temp":301.38,"feels_like":303.58,"temp_min":301.38,"temp_max":301.88,"pressure":1017,"humidity":65},"visibility":5000,"wind":{"speed":4.12,"deg":80},"clouds":{"all":75},"dt":1666333196,"sys":{"type":1,"id":9214,"country":"IN","sunrise":1666312830,"sunset":1666354845},"timezone":19800,"id":1269843,"name":"Hyderabad","cod":200}]
```

```
Command Prompt - python
C:\Users\USER>python
Python 3.10.8 (tags/v3.10.8:aaaf517, Oct 11 2022, 16:50:30) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import requests
>>> api_data="https://api.openweathermap.org/data/2.5/weather?q=Hyderabad,IN&appid=121da254d7b328809bf6c422fd6f3623"
>>> rec=requests.get(url=api_data)
>>> data=rec.json()
>>> print(data)
{'coord': {'lon': 78.4744, 'lat': 17.3753}, 'weather': [{'id': 721, 'main': 'Haze', 'description': 'haze', 'icon': '50d'}], 'base': 'stations', 'main': {'temp': 301.38, 'feels_like': 303.07, 'temp_min': 301.38, 'temp_max': 301.88, 'pressure': 1017, 'humidity': 61}, 'visibility': 5000, 'wind': {'speed': 3.6, 'deg': 90}, 'clouds': {'all': 40}, 'dt': 1666335428, 'sys': {'type': 1, 'id': 9214, 'country': 'IN', 'sunrise': 1666312830, 'sunset': 1666354845, 'timezone': 19800, 'id': 1269843, 'name': 'Hyderabad', 'cod': 200}}
>>>
```