

Develop the Python Script

(Develop a Python script)

Date	04 November 2022
Team ID	PNT2022TMID13566
Project Name	Industry-specific intelligent fire management system
Maximum Marks	4 Marks

Industry-specific intelligent fire management system

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

MATHAVAN B:

The screenshot shows the OpenWeatherMap website in a web browser. The address bar displays 'home.openweathermap.org'. A green confirmation message at the top states: 'We have sent the confirmation link to mathavanvj15@gmail.com. Please check your email.' Below this, a navigation bar includes links for 'New Products', 'Services', 'API keys', 'Billing plans', 'Payments', 'Block logs', 'My orders', 'My profile', and 'Ask a question'. The main content area features a section titled 'Historical weather for any location' with a background image of a sunset. The text describes the 'Time Machine' technology and lists features: 'Historical weather data available for ANY coordinate' and 'The depth of historical data have been extended to 40 YEARS'. It also mentions that data can be downloaded from a 'Personal account' or by contacting them. Two buttons, 'Learn more' and 'Go to purchase', are visible. At the bottom, there is a 'Weather Dashboard' section with a description: 'The OpenWeather Dashboard is a lightweight and flexible visual tool for our customers who would'. The Windows taskbar at the bottom shows the search bar and several open applications including 'New fold...', 'ci-pipelin...', 'Node-RE...', 'Members...', and 'WhatsApp...'. The system clock indicates the time is 13:09 on 04-11-2022.

Find - OpenWeatherMap

openweathermap.org/find?utf8=✓&q=chennai

OpenWeather Weather in your city Guide API Dashboard Marketplace Pricing Maps Our Initiatives Partners Blog For Business Math... Support

Weather in your city

chennai Search

Chennai, IN scattered clouds

30°C temperature from 30 to 30 °C, wind 7.2 m/s, clouds 40 %, 1009 hpa

Geo coords [13.0878, 80.2785]

Search engine is very flexible. How it works:

- To make it more precise put the city's name, comma, 2-letter country code (ISO3166). You will get all proper cities in chosen country. The order is important - the first is city name then comma then country. Example - London, GB or New York, US.

Type here to search

New fo... IBM-Pr... Node-... Find - ... Whats... Open... ENG 16:30 04-11-2022

PREM KUMAR R :


Members

home.openweathermap.org

OpenWeather Weather in your city Guide API Dashboard Marketplace Pricing Maps Our Initiatives Partners Blog For Business Prem... Support

We have sent the confirmation link to **rprenk12@gmail.com**. Please check your email.

New Products Services API keys Billing plans Payments Block logs My orders My profile Ask a question



Historical weather for any location

Our new technology, Time Machine, has allowed us to enhance the data in the **Historical Weather Collection**.

- Historical weather data available for **ANY** coordinate
- The depth of historical data have been extended to **40 YEARS**

You can download data from **Personal account** or **contact us** to order it.

Learn more Go to purchase

Weather Dashboard

The OpenWeather Dashboard is a lightweight and flexible visual tool for our customers who would

Type here to search

New fo... IBM-Pr... Node-... Memb... Whats... Open... ENG 16:27 04-11-2022

SATHISHKUMAR S :

The screenshot shows the OpenWeather website in a web browser. The address bar displays 'home.openweathermap.org'. The navigation bar includes links for 'Weather in your city', 'Guide', 'API', 'Dashboard', 'Marketplace', 'Pricing', 'Maps', 'Our Initiatives', 'Partners', 'Blog', 'For Business', 'Sathi...', and 'Support'. A green confirmation message states: 'We have sent the confirmation link to sathishkumarfb152002@gmail.com. Please check your email.' Below this, a horizontal menu lists 'New Products', 'Services', 'API keys', 'Billing plans', 'Payments', 'Block logs', 'My orders', 'My profile', and 'Ask a question'. The main content area features a large image of a sky with clouds and a sun. To the right of the image, the heading 'Historical weather for any location' is displayed in red. Below the heading, a paragraph states: 'Our new technology, Time Machine, has allowed us to enhance the data in the [Historical Weather Collection](#).' This is followed by a bulleted list: '• Historical weather data available for **ANY** coordinate' and '• The depth of historical data have been extended to **40 YEARS**'. Below the list, a sentence reads: 'You can download data from [Personal account](#) or [contact us](#) to order it.' At the bottom of this section are two orange buttons: 'Learn more' and 'Go to purchase'. Below the main content area, there is a section titled 'Weather Dashboard' with a subheading 'The OpenWeather Dashboard is a lightweight and flexible visual tool for our customers who would'. The Windows taskbar at the bottom shows the search bar and several application icons, including 'Screen...', 'IBM-Pr...', 'Node...', 'Memb...', 'Whats...', 'Open...', and 'ENG'. The system clock shows '16:31' and '04-11-2022'.

YASVEEN ADITHYA B :

The screenshot shows the OpenWeather website in a web browser. The address bar displays 'home.openweathermap.org'. The navigation bar includes links for 'Weather in your city', 'Guide', 'API', 'Dashboard', 'Marketplace', 'Pricing', 'Maps', 'Our Initiatives', 'Partners', 'Blog', 'For Business', 'Yasv...', and 'Support'. A green confirmation message states: 'We have sent the confirmation link to yasveenadithya@gmail.com. Please check your email.' Below this, a horizontal menu lists 'New Products', 'Services', 'API keys', 'Billing plans', 'Payments', 'Block logs', 'My orders', 'My profile', and 'Ask a question'. The main content area features a large image of a sky with clouds and a sun. To the right of the image, the heading 'Historical weather for any location' is displayed in red. Below the heading, a paragraph states: 'Our new technology, Time Machine, has allowed us to enhance the data in the [Historical Weather Collection](#).' This is followed by a bulleted list: '• Historical weather data available for **ANY** coordinate' and '• The depth of historical data have been extended to **40 YEARS**'. Below the list, a sentence reads: 'You can download data from [Personal account](#) or [contact us](#) to order it.' At the bottom of this section are two orange buttons: 'Learn more' and 'Go to purchase'. Below the main content area, there is a section titled 'Weather Dashboard' with a subheading 'The OpenWeather Dashboard is a lightweight and flexible visual tool for our customers who would'. The Windows taskbar at the bottom shows the search bar and several application icons, including 'Screen...', 'IBM-Pr...', 'Node...', 'Memb...', 'Whats...', 'Open...', and 'ENG'. The system clock shows '16:33' and '04-11-2022'.

OUTPUT:

```
weatherMap.py - E:/IBM/pre/weatherMap.py (3.6.3)
File Edit Format Run Options Window Help

import requests
a = "https://api.openweathermap.org/data/2.5/weather?q=Chennai,IN&appid=6d13d12f9cd34a07871a5795d01e2c47"
r = requests.get(url = a)
data = r.json()
print(r)
print(data)
temp = data["main"]["temp"]
hum = data["main"]["humidity"]
print("Temperature is : ",temp)
print("Humidity is : ",hum)
```

```
Python 3.6.5 Shell
File Edit Shell Debug Options Window Help

<Response [200]>
Temperature is : 298.14
>>>
===== RESTART: E:/IBM/pre/weatherMap.py =====
====
<Response [200]>
{'coord': {'lon': 80.2785, 'lat': 13.0878}, 'weather': [{'id': 701, 'main': 'Mist', 'description': 'mist', 'icon': '50n'}, {'id': 500, 'main': 'Rain', 'description': 'light rain', 'icon': '10n'}], 'base': 'stations', 'main': {'temp': 298.14, 'feels_like': 299.15, 'temp_min': 298.14, 'temp_max': 298.14, 'pressure': 1012, 'humidity': 94}, 'visibility': 2500, 'wind': {'speed': 1.54, 'deg': 350}, 'rain': {'1h': 0.12}, 'clouds': {'all': 75}, 'dt': 1667317416, 'sys': {'type': 1, 'id': 9218, 'country': 'IN', 'sunrise': 1667262751, 'sunset': 1667304738, 'timezone': 19800, 'id': 1264527, 'name': 'Chennai', 'cod': 200}
Temperature is : 298.14
Humidity is : 94
>>>
```

Ln: 10 Col: 26