

Develop a Python script

Team ID	PNT2022TMID01720
Project Name	SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITIAN CITIES
Maximum Marks	4 Marks

SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITIAN CITIES

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

Sami Venkata Sai Rajeev:

The screenshot shows a web browser window with the OpenWeatherMap website. The address bar shows 'home.openweathermap.org'. A green notification banner at the top states: 'We have sent the confirmation link to saravanasudhansubramanian2002@gmail.com. Please check your email.' Below this, a navigation bar includes links like '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 sunset and a section titled 'Historical weather for any location'. This section 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 'contact us'. Two buttons, 'Learn more' and 'Go to purchase', are visible. At the bottom of the browser window, the Windows taskbar is visible with the search bar and various application icons. The system clock shows 21:23 on 03-11-2022.

IBM Project-2741-1658481981/Find - OpenWeatherMap

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

Weather in your city

chennai Search

Chennai, IN light intensity drizzle

25°C temperature from 25 to 25 °C, wind 1.54 m/s, clouds 75 %, 1012 hpa

Geo coords [13.0878, 80.2785]

Search engine is very flexible. How it works:

We use cookies which are essential for the site to work. We also use non-essential cookies to help us improve our services. Any data collected is anonymised. You can allow all cookies or manage them individually.

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DOWNLOAD

Type here to search

21:23 03-11-2022

Sarvepalli Navya:

Members

home.openweathermap.org

Weather in your city

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 like to be notified weather events to make informed decisions and plan actions based on the weather input.

- Track the main weather parameters: temperature, wind speed, precipitations
- Weather data are updated every hour
- Global coverage - Choose any location on the globe
- Email notifications

Type here to search

21:29 03-11-2022

Purini Yasaswini:

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', 'Tamil', and 'Support'. A green confirmation message states: 'We have sent the confirmation link to **tamilinian07@gmail.com**. Please check your email.' Below this is a horizontal menu with '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 sunset over a body of water. To the right of the image, the heading 'Historical weather for any location' is displayed. 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 line of text says: 'You can download data from **Personal account** or **contact us** to order it.' At the bottom of the promotional section are two orange buttons: 'Learn more' and 'Go to purchase'. The Windows taskbar at the bottom shows the search bar and various application icons.

Danisetty Sushwanth:

This screenshot shows the OpenWeather website with a confirmation message for 'mohamedumar00786@gmail.com'. The layout is identical to the previous screenshot, including the navigation bar, confirmation message, horizontal menu, and the 'Historical weather for any location' promotional banner with its image, text, and buttons. Below the promotional banner, there is a section titled 'Weather Dashboard' with a heading and a sub-heading: '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 various application icons.

OUTPUT:

```
weatherMap.py - E:/IBM/pre/weatherMap.py (3.6.5)
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'}], 'bas
e': 'stations', 'main': {'temp': 298.14, 'feels_like': 299.15, 'temp_min': 298.14, 'temp_ma
x': 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': 1
264527, 'name': 'Chennai', 'cod': 200}
Temperature is : 298.14
Humidity is : 94
>>>
```

Ln: 10 Col: 26

Ln: 17 Col: 4

Windows taskbar: Rain to stop, 9:17 PM, 11/1/2022