

## Develop a Python script

|               |  |
|---------------|--|
| Team ID       | PNT2022TMID18390                                       |
| 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

The screenshot shows the OpenWeatherMap website. The browser tabs include IBM, GitHub - IBM-EPBL/IBM-Project, IBM-Project-13768-165952956, and Members. The address bar shows home.openweathermap.org. The website has a navigation bar with links: Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, Kan..., and Support. A green notification banner states: "We have sent the confirmation link to vengababukancharia369@gmail.com. Please check your email." Below this is a menu with links: New Products, Services, API keys, Billing plans, Payments, Block logs, My orders, My profile, and Ask a question. The main content area features two sections: "Historical weather for any location" and "Weather Dashboard". The "Historical weather for any location" section includes a description of the Time Machine technology, a list of features (Historical weather data available for ANY coordinate, The depth of historical data have been extended to 40 YEARS), and a note that data can be downloaded from a Personal account or by contacting them. It has two buttons: "Learn more" and "Go to purchase". The "Weather Dashboard" section includes a description of the dashboard as a lightweight and flexible visual tool, a list of features (Track the main weather parameters: temperature, wind speed, precipitations; Weather data are updated every hour), and an illustration of a dashboard with various charts and maps. The Windows taskbar at the bottom shows the search bar, taskbar icons, and system tray with the date 15-11-2022 and time 16:06.

IBM

GitHub - IBM-EPBL/IBM-Project

IBM-Project-13768-165952956

Members

home.openweathermap.org

OpenWeather

Weather in your city

Guide API Dashboard Marketplace Pricing Maps Our Initiatives Partners Blog For Business Kan... Support

We have sent the confirmation link to vengababukancharia369@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**

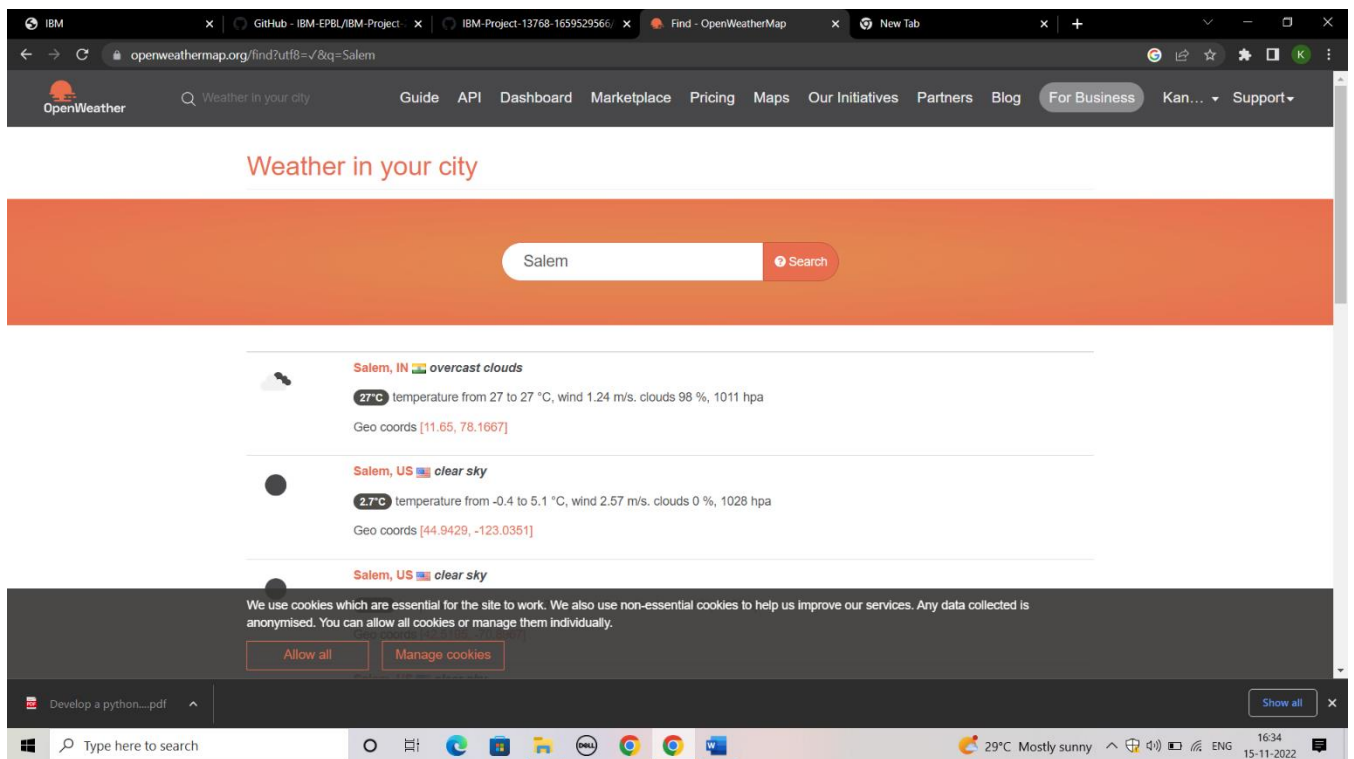
You can download data from **Personal account** or **contact us** to order it.

Learn more Go to purchase

**Weather Dashboard**

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



## 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'}], '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: 17 Col: 4
Ln: 10 Col: 26

```