

# Develop the Python Script

## ( Develop a Python Script)

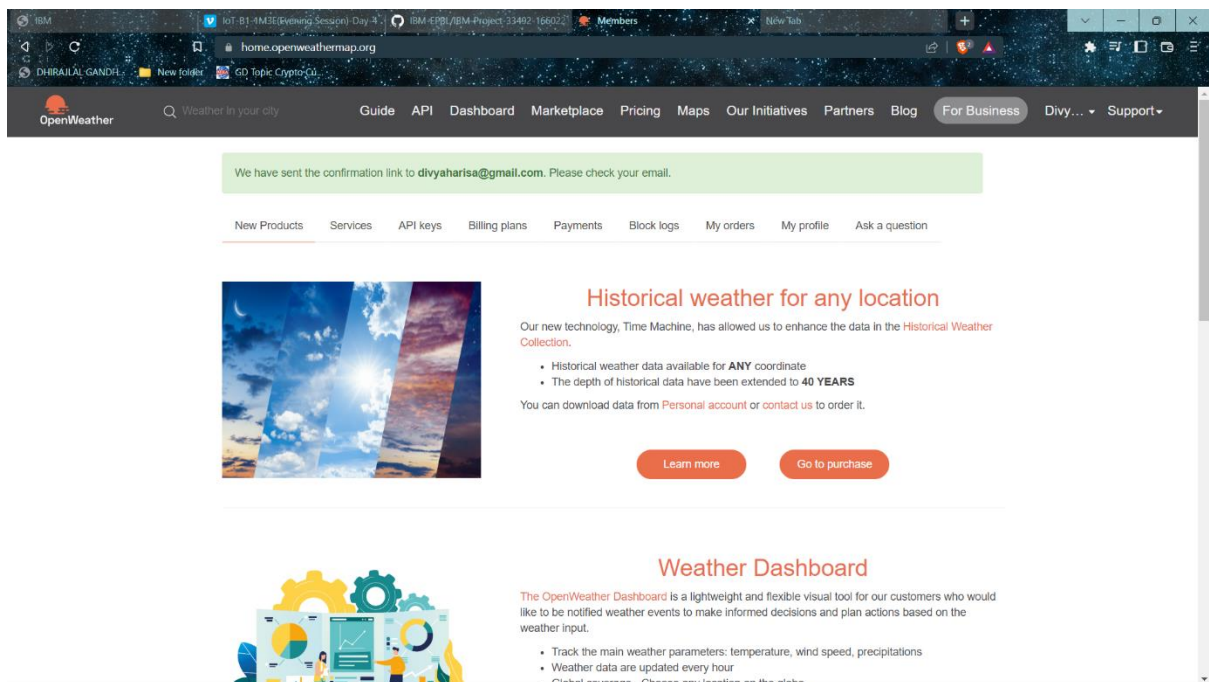
Team ID	PNT2022TMID29941
Project Name	Industry Specific Intelligent Fire Management System

### Industry Specific Intelligent Fire Management System

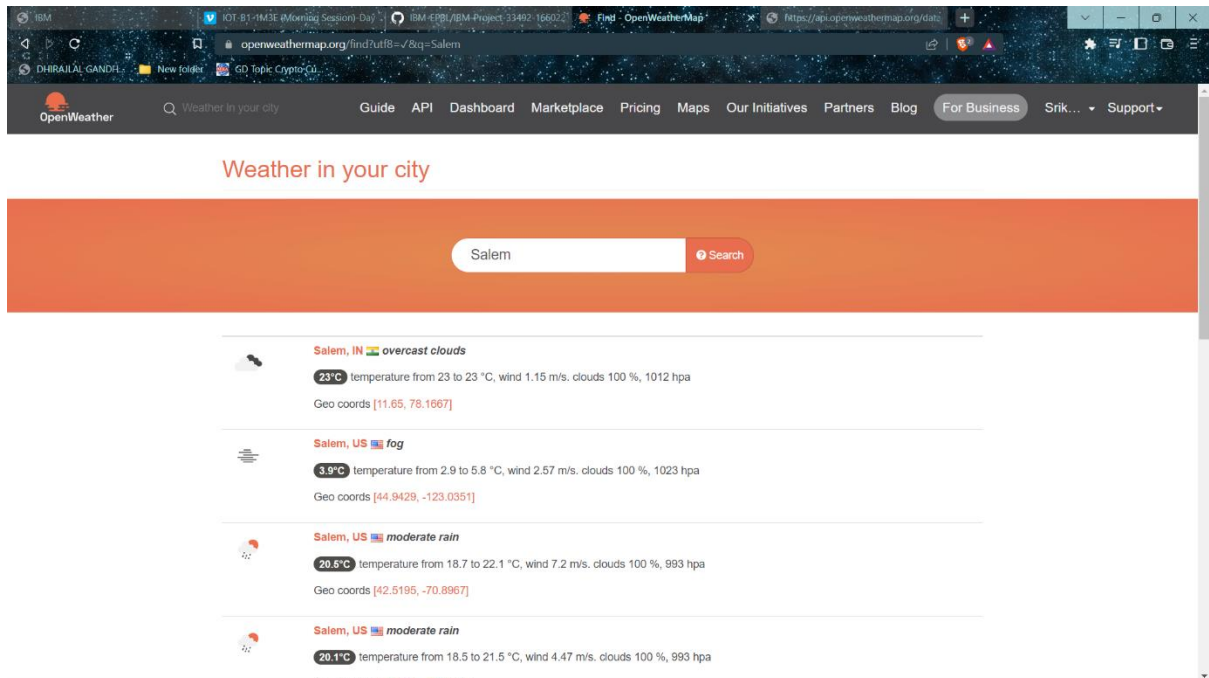
Create a code snippet using python to:

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

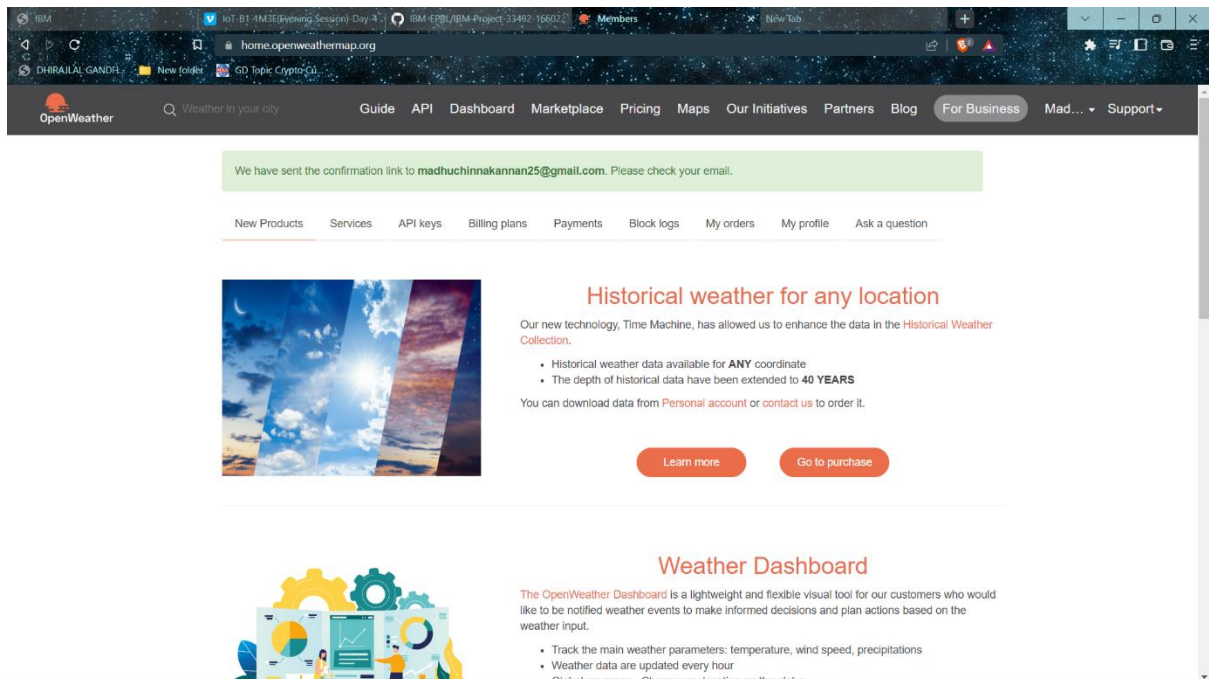
**DIVYA.S**



The screenshot shows the OpenWeatherMap website interface. At the top, there's a navigation bar with links like Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, Divy..., and Support. Below the navigation bar, a green confirmation message states: "We have sent the confirmation link to divyahas@gmail.com. Please check your email." Below this, there's a section titled "Historical weather for any location" with a sub-header "Our new technology, Time Machine, has allowed us to enhance the data in the Historical Weather Collection." This section lists two bullet points: "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. There are two buttons: "Learn more" and "Go to purchase". Below this, there's another section titled "Weather Dashboard" with a sub-header "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." This section lists three bullet points: "Track the main weather parameters: temperature, wind speed, precipitations", "Weather data are updated every hour", and "Global coverage - Choose any location on the globe".



## MADHUMITHA.C



KIRUTHIKA.S

The screenshot shows the OpenWeather website interface. At the top, a navigation bar includes the OpenWeather logo, a search bar, and links for Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, and Support. A green confirmation banner states: "We have sent the confirmation link to kiruthigasenthil5@gmail.com. Please check your email." Below this, a secondary navigation bar lists: New Products, Services, API keys, Billing plans, Payments, Block logs, My orders, My profile, and Ask a question. The main content area features two promotional banners. The first banner, titled "Historical weather for any location", includes an image of a sunset and text describing the "Time Machine" technology, which enhances historical weather data for any coordinate over a 40-year period. It offers a "Learn more" button and a "Go to purchase" button. The second banner, titled "Weather Dashboard", includes an image of a dashboard with charts and text describing it as a lightweight visual tool for tracking weather parameters. It also offers a "Learn more" button and a "Go to purchase" button.

We have sent the confirmation link to [kiruthigasenthil5@gmail.com](mailto:kiruthigasenthil5@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
- Global coverage • [Choose any location on the globe](#)

SRIKARTHIKEYAN.S

This screenshot is identical to the one above, showing the OpenWeather website with a confirmation message for SRIKARTHIKEYAN.S. The confirmation banner states: "We have sent the confirmation link to srikarthikeyan0207@gmail.com. Please check your email." The rest of the page content, including the navigation bars and promotional banners for "Historical weather for any location" and "Weather Dashboard", is the same as in the previous screenshot.

We have sent the confirmation link to [srikarthikeyan0207@gmail.com](mailto:srikarthikeyan0207@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
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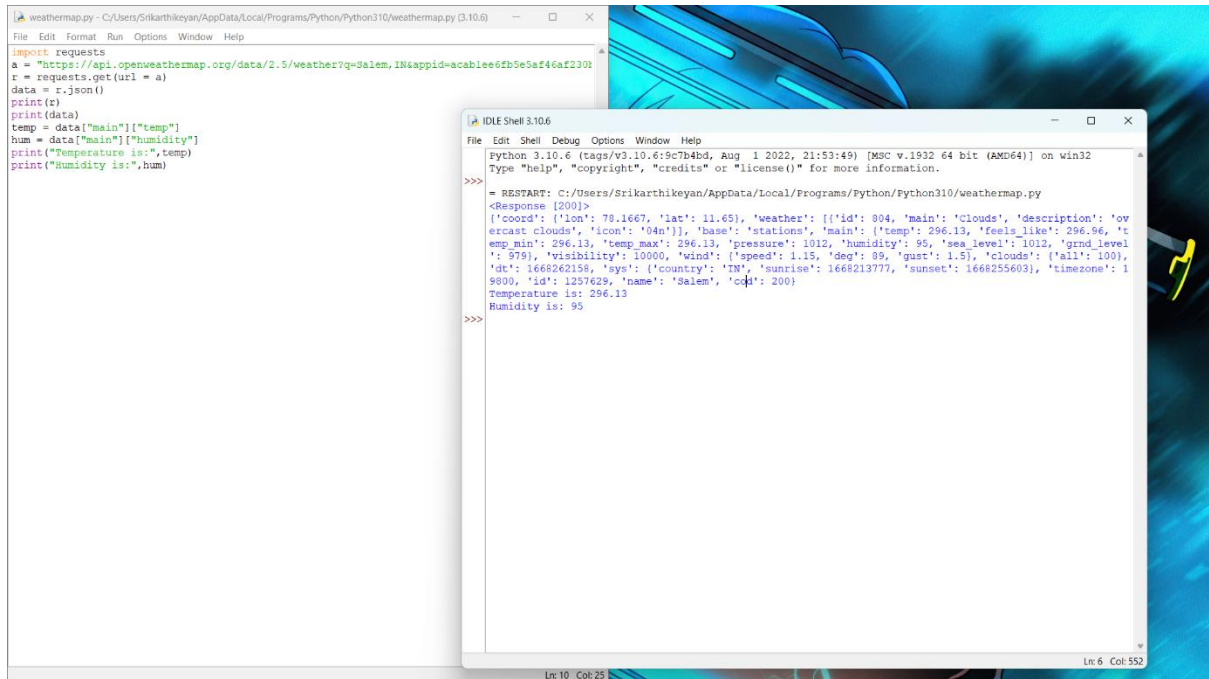
[Learn more](#) [Go to purchase](#)

### 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](#)

## OUTPUT:



The image shows a screenshot of a Python script and its output in an IDE. The script, named `weathermap.py`, is located at `C:/Users/Srikarhikeyan/AppData/Local/Programs/Python/Python310/weathermap.py (3.10.6)`. The script uses the `requests` library to fetch weather data from the OpenWeatherMap API for Salem, India. The output, displayed in the `IDLE Shell 3.10.6`, shows the raw JSON response and the extracted temperature and humidity values.

```
weathermap.py - C:/Users/Srikarhikeyan/AppData/Local/Programs/Python/Python310/weathermap.py (3.10.6)
File Edit Format Run Options Window Help

import requests
a = "https://api.openweathermap.org/data/2.5/weather?q=Salem,IN&appid=acablee6fb5e5af46af230f44682213777"
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)
```

```
IDLE Shell 3.10.6
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug 1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>
= RESTART: C:/Users/Srikarhikeyan/AppData/Local/Programs/Python/Python310/weathermap.py
<Response [200]>
{'coord': {'lon': 78.1667, 'lat': 11.65}, 'weather': [{'id': 804, 'main': 'Clouds', 'description': 'overcast clouds', 'icon': '04n'}], 'base': 'stations', 'main': {'temp': 296.13, 'feels_like': 296.96, 'temp_min': 296.13, 'temp_max': 296.13, 'pressure': 1012, 'humidity': 95, 'sea_level': 1012, 'grnd_level': 979}, 'visibility': 10000, 'wind': {'speed': 1.15, 'deg': 89, 'gust': 1.5}, 'clouds': {'all': 100}, 'dt': 1668262158, 'sys': {'country': 'IN', 'sunrise': 1668213777, 'sunset': 1668255603}, 'timezone': 19800, 'id': 1257629, 'name': 'Salem', 'cod': 200}
Temperature is: 296.13
Humidity is: 95
>>>
```

Ln: 10 Col: 25