

# Develop the Python Script

(Develop a Python script)

Create a code snippet using python to

<b>Team id</b>	PNT2022TMID24481
<b>Project name</b>	IOT Based Industry – Specific Intelligent Fire Management System

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

Pelluru Manasa :

The screenshot shows a web browser with multiple tabs open, including GitHub, IBM, and various IBM services. The active tab is the OpenWeatherMap website (home.openweathermap.org). A green confirmation banner at the top states: "We have sent the confirmation link to manasapelluru01@gmail.com. Please check your email." Below this, there are navigation links for New Products, Services, API keys, Billing plans, Payments, Block logs, My orders, My profile, and Ask a question. Two main promotional banners are visible: "Historical weather for any location" which highlights the "Time Machine" technology for enhancing historical data, and "Weather Dashboard" which describes a lightweight visual tool for weather events. The bottom of the page shows a Windows taskbar with the system clock at 09:23 PM on 17-11-2022.

Polu Tejaswini Reddy:

The screenshot shows the OpenWeather website with a confirmation message: "We have sent the confirmation link to tejaswinipolu@gmail.com. Please check your email." The navigation bar includes links for Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, tejas..., and Support. Below the message, there is a horizontal 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 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 states, "You can download data from Personal account or contact us to order it." Below this text are two buttons: "Learn more" and "Go to purchase". Further down, there is a 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 two bullet points: "Track the main weather parameters: temperature, wind speed, precipitations" and "Weather data are updated every hour". The bottom of the page shows a Windows taskbar with the date and time as 09:30 PM on 17-11-2022.

Deepika M:

The screenshot shows the OpenWeather website with a confirmation message: "We have sent the confirmation link to munagacherladeepika@gmail.com. Please check your email." The navigation bar includes links for Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, dee..., and Support. Below the message, there is a horizontal 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 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 states, "You can download data from Personal account or contact us to order it." Below this text are two buttons: "Learn more" and "Go to purchase". Further down, there is a 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 two bullet points: "Track the main weather parameters: temperature, wind speed, precipitations" and "Weather data are updated every hour". The bottom of the page shows a Windows taskbar with the date and time as 09:37 PM on 17-11-2022.

Chandhana RC:

The screenshot shows the OpenWeather website interface. At the top, a navigation bar includes links for Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, and Support. A green confirmation message states: "We have sent the confirmation link to chandhanarc015@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 provides historical data for any coordinate for up to 40 years. It includes buttons for "Learn more" and "Go to purchase". The second banner, titled "Weather Dashboard", features an image of a dashboard with charts and text describing it as a lightweight visual tool for tracking weather parameters like temperature, wind speed, and precipitation. It also includes buttons for "Learn more" and "Go to purchase". The bottom of the page shows a Windows taskbar with the system clock at 09:39 PM on 17-11-2022.

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
>>>
```



