

Weather App

Create a Python application that automatically retrieves the current weather for Sana'a, Aden, and Hodeidah (Yemen) every 5 minutes, and writes the data to a text file — one line per API call.

Requirements & Steps:

1- Get API Access:

- Go to: <https://openweathermap.org/api>
- Sign up (free account)
- Get your API key.

2- Prepare Your Environment:

- Create a new virtual environment and activate it.
- Install required libraries: requests.

3- Create Your Python Script:

- Your program should:
 - o Import the needed libraries: `requests`, `time`, `datetime`
 - o Create a list of the cities:
 - `cities = ["Sanaa", "Aden", "Hodeidah"]`
 - o Inside an infinite loop:
 - For each city:
 - a) Call the OpenWeather API
 - b) Extract: City name, Temperature, Time of the call
 - c) Write them in a text file (weather_log.txt) in one line per city per call.
 - Wait 5 minutes (300 seconds) before the next call.

4- Example Log Format:

Each line in the file should look like this:

[2025-11-11 09:00:00] Sanaa: 22°C | Aden: 28°C | Hodeidah: 30°C

5- Additional Tasks

- Handle API errors (e.g., no internet connection).
- Use JSON formatting instead of plain text.
- Save logs in a .csv file for easier data analysis.
- Print each update to the console too.

Tips:

- Use `datetime.datetime.now().strftime("%Y-%m-%d %H:%M:%S")` to format timestamps.
- Always test with a shorter time (like 10 seconds) during development, then switch to 300 seconds (5 minutes).