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Task: Weather forecast visualization using Python &API
Internship:CODTECH PYTHON INTERNSHIP

Objective:

To *fetch and visualize 5-day weather forecast data for Hyderabad using the OpenWeatherMap API and Python libraries like matplotlib and seaborn.*

Tools & Technologies:

- Python 3.12.4
- OpenWeatherMap API
- matplotlib
- Seaborn
- requests library
- VS Code (IDE)

API Setup & Code Snippet:

API_KEY = "your_api_key"

CITY = "Hyderabad"

URL=f"http://api.openweathermap.org/data/2.5/forecast?q={CITY}&appid={API_KEY}&units=metric"

Data Fetching & Processing:

response = requests.get(URL)

data = response.json()

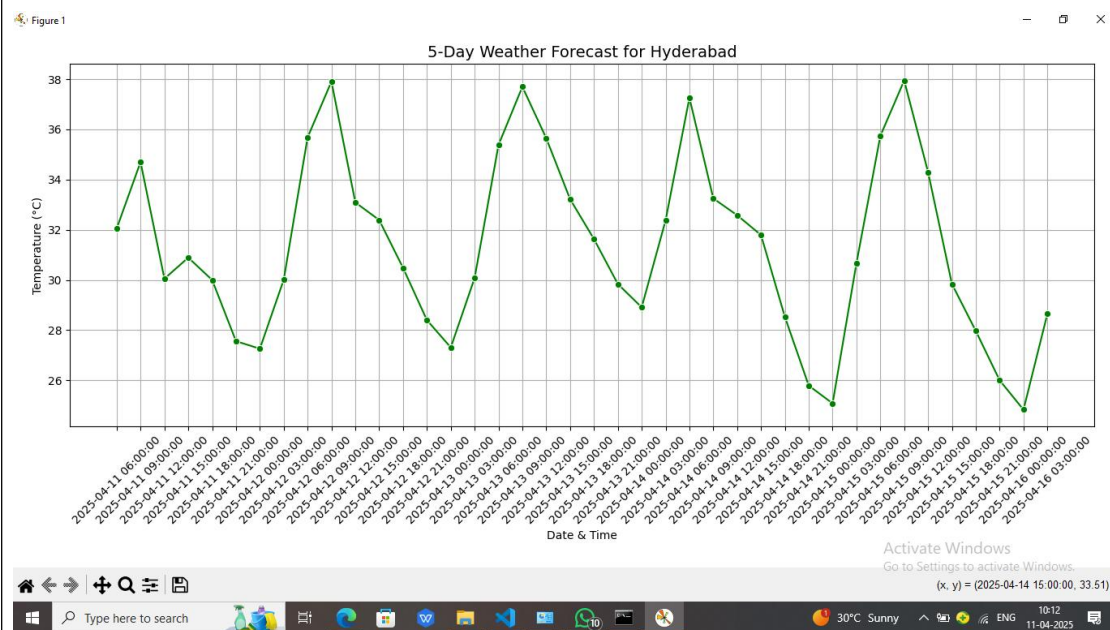for entry in data['list']:

   dates.append(entry['dt_txt'])

   temps.append(entry['main']['temp'])

- Fetched data using `requests.get()`
- Parsed JSON using `.json()`
- Extracted date and temperature from the API response

Graph Output:

Conclusion:

Successfully implemented weather forecasting using Python and API integration. Gained hands-on experience in working with real-time data and data visualization.

Mention: *"Thanks to CODTECH for the opportunity"*