

Task Description

Write a Python program that:

- Accepts a list of city names from the user.
- Uses the OpenWeatherMap API (or any mock API if you're offline) to fetch weather data.
- Filters out cities where the temperature is above 30°C.
- Stores city names and their temperature in a list of tuples.
- Converts the final list to a set of unique city names.
- Displays results using slicing, indexing, and looping with conditions.
- Handles network errors and invalid city names gracefully.
- Uses functions for modular design.
- Uses list comprehension to extract hot cities.

Once you prepare this solution then based on solution give below answers

1. Write a function to clean and process a comma-separated list of cities.
2. Write a try-except block to handle errors from an API call.
3. Use list comprehension to filter based on a condition.
4. Store temperature data using tuples and access it using indexing/slicing.
5. Use sets to get unique entries.
6. Write logic using loops and conditions to classify temperatures.
7. Add debugging prints or `pdb.set_trace()` for stepwise inspection.