Iteration 1

Completing the ForecastWorker

This phase focuses on completing the code for the `ForecastWorker` component of the Weather Forecast Application. This class is responsible for retrieving weather forecast data from the National Weather Service API. The partial implementation can be found in the `weather_app` directory in the file named `forecast_worker.py`.

The code you are expected to complete primarily focuses on interacting with **CSV files**—specifically, processing and saving daily and hourly forecast data into structured files. Each TODO (explained below) corresponds to a step in this process and supports the system's overall functionality for organizing and storing forecast data.

What Is a TODO?

A **TODO** is a comment used by developers to mark a place in the code where work needs to be done. These comments usually serve as placeholders or reminders to return to a specific section and complete it later. In Python, they typically look like this:

```
# TODO: Implement error handling for invalid responses
```

TODOs are ignored by the Python interpreter but can be picked up by development tools to help track outstanding tasks.

Using the TODO Tool Window in PyCharm

PyCharm automatically detects TODO comments and displays them in a centralized tool window for easy navigation.

To access the TODO tool window:

1. Go to the **bottom panel** of the PyCharm interface.
2. Click on the **"TODO"** tab.
    - If it's not visible, open it via the menu:
      `View > Tool Windows > TODO`

This window will show a list of all TODO comments in the project, grouped by file. Clicking any item in the list will take you directly to that line in the code.

This feature is especially helpful for locating unfinished code across multiple files without manually scrolling through everything.

Your Task

Your job in Iteration 1 is to:

- Open the file `forecast_worker.py` inside the `weather_app` directory.
- Locate all TODO comments in the file. You may use the TODO tool window in PyCharm to assist you.
- Carefully review the surrounding code and complete all the tasks indicated by the TODOs.
- Follow proper Python syntax and best practices.
- Keep your code readable and well-organized. Hint: repurpose the instructional comments to anotate your code.
- You can test your implementation by running the `main()` function at the bottom of the file. If successful, the weather forecast should be retrieved and written to the appropriate CSV file.

What to Submit

- Push your updated `forecast_worker.py` file to your GitHub repository.
- Make sure your changes are committed with clear and descriptive messages.
- Verify that all TODO comments have been resolved and removed unless explicitly marked to remain.

```
# Example commit message
git commit -m "Complete ForecastWorker implementation for Iteration 1"
```

Now feel proud of yourself even if you aren't proud of your work. You just completed the first step of your first major project for Computer Science.