Project Instructions — Stage 05: Data Storage (preview)

Today's Project Contribution:

Today you'll complete a piece of your full data project.

This task aligns with the **Data Storage** lifecycle stage, where you will:

- Save and reload raw data reproducibly using environment-driven paths.
- Add storage conventions and documentation to your repo.

By the end of this assignment, your project should include the elements listed below.

Deliverable Options (from Stage Scaffold)

Required:

- data/raw/ and data/processed/ folder structure.
- At least one saved raw data file (e.g., .csv or .parquet).
- Add a Data Storage section to README.md explaining:
 - o data folder structure,
 - o file formats used, and
 - o how your code reads from these files.
- Use of .env + secure file path handling (e.g., via os.getenv(...)) especially if loading from protected locations or environment variables set earlier.

How This Fits Into Your Final Project:

Your work today ensures anyone can **recreate your data state** by running your IO code, unlocking reliable preprocessing and modeling later.

Before next class:

- Save files in /data/raw/ and /data/processed/ as appropriate.
- Commit and push changes to your GitHub repo (never commit .env).
- Review assumptions, risks, and validation notes in your notebook/README.

Explicit Chain:

In your homework, you produced CSV + Parquet saves, reloads, and IO utilities with env-driven paths. Now, you will adapt that work to formalize your project's storage layer and documentation so teammates can run it without path edits.

By the end of the course: your full project will follow the complete lifecycle.