Project 5 — Data Explorer with Natural Commands

Story

A non-technical customer brings a dataset and asks: "show seasonality by region," "top 5 products this quarter." They expect sensible views and quick refinements—**without learning a BI tool**.

Problem Statement

Build a small data app that loads a table, supports common ops (filter/sort/group/aggregate/pivot), **auto-suggests views**when requests are vague, and lets customers refine using **plain language**.

Key Requirements (only — from Customer)

- **Talk, don't tool:** Describe needs in everyday language and get useful views.
- **Give options when vague:** Offer **2–3 interpretations**, let me pick.
- **Tell me what you did:** Short, human-readable explanation of the current view/op.
- **Feels smooth:** Works on **mid-sized data** (thousands → tens of thousands of rows).
- **Let me take it with me:** Easy **export** of the current view.

Deliverable (single)

Streamlit app: CSV uploader; table preview; NL command box; suggestions panel (confirm/apply); chart area; "operation explain" panel; export. JSON persistence is fine.

Hint

Use a **configurable operation library** and keep explanations front-and-center so customers stay oriented while refining naturally.

> **Note:** Sample datasets and submission forms will follow in subsequent email chains. A high-level walkthrough will be provided in tomorrow's kickoff call.