**Expense Tracker**

**Field:** Personal Finance / Budgeting

**📄 Problem Statement:**  
Design a Python program that helps users analyze their spending habits. The program should load an expense dataset, categorize transactions, and summarize total spending by category and month.

**💾 Dataset Fields:**

| **Field** | **Description** |
| --- | --- |
| Date | Date of the transaction |
| Category | Type of expense (e.g., Food, Rent, Travel, Shopping) |
| Description | Optional text about the purchase |
| Amount | Amount spent (positive for expense, negative for income) |

**💡**

* Reading and cleaning CSV data with pandas
* Grouping data by category and month
* Using datetime for date manipulation
* Visualizing spending with matplotlib or seaborn

**Example Goal:**

Show total monthly expenses and top 3 spending categories.

**City Air Quality Dashboard**

**Field:** Environmental Data / Public Health

**📄 Problem Statement:**  
Create a Python program that processes and visualizes air quality data for multiple cities. The goal is to identify the most polluted cities and track pollution trends over time.

**💾 Dataset Fields:**

| **Field** | **Description** |
| --- | --- |
| Date | Date of measurement |
| City | City name |
| PM2.5 | Particulate Matter concentration (µg/m³) |
| PM10 | Larger particulate matter concentration |
| NO2 | Nitrogen dioxide levels |
| O3 | Ozone concentration |
| AQI | Air Quality Index value |

* Cleaning and filtering real-world environmental data
* Grouping and summarizing pollution metrics by city/date
* Detecting trends over time
* Plotting multi-line graphs for pollution levels

**Example Goal:**

Show AQI trends for 3 major cities over the last 12 months.