**🧠 Problem Set**

**Part 1: Basic Exploration**

1. Load the CSV and print the first 10 rows.
2. What are the column names and data types?
3. How many unique cities are there in the Location column?
4. How many customers are subscribed vs not subscribed?

**Part 2: Filtering & Querying**

1. Filter the dataset to only customers who are subscribed (IsSubscribed == True).
2. Get all customers who have spent more than $1000 and placed more than 5 orders.
3. Who are the top 5 spenders?

**Part 3: Grouping & Aggregation**

1. What is the average amount spent (TotalSpent) per subscription status?
2. What is the total number of orders per city?
3. What is the average number of orders by age group (create age bins: 18–30, 31–45, 46–60, 61+)?

**Part 4: Date Handling**

1. Convert the SignupDate column to datetime (if not already).
2. Which customers signed up in 2025?
3. What’s the average spend for customers who signed up in the last 6 months?

**Part 5: Data Transformation**

1. Create a new column called AvgOrderValue (i.e., TotalSpent / NumOrders).
2. Add a new column TenureDays that shows how many days each customer has been with the company (assume today is 2025-08-07).