Let me first load and examine the contents of the three files: **Transactions.csv**, **Products.csv**, and **Customers.csv**.

Dataset Overview

Transactions Dataset

- **Rows:** 1,000
- **Columns:** 7
  - Key columns: `TransactionID`, `CustomerID`, `ProductID`, `TransactionDate`, `Quantity`, `TotalValue`, and `Price`.
  - No missing values.
  - `TransactionDate` appears to be a timestamp and might need to be converted to a datetime format for analysis.

Products Dataset

- **Rows:** 100
- **Columns:** 4
  - Key columns: `ProductID`, `ProductName`, `Category`, and `Price`.
  - No missing values.

Customers Dataset

- **Rows:** 200
- **Columns:** 4
  - Key columns: `CustomerID`, `CustomerName`, `Region`, and `SignupDate`.
  - No missing values.

Initial Observations:

1. The datasets appear to have consistent relationships through `ProductID` (linking Transactions and Products) and `CustomerID` (linking Transactions and Customers).
2. All datasets are complete with no missing values, simplifying the preprocessing step.

Next Steps

1. Perform data cleaning and ensure appropriate data types (e.g., converting `TransactionDate` and `SignupDate` to datetime).
2. Merge the datasets for analysis using `CustomerID` and `ProductID`.
3. Begin exploratory data analysis (EDA) to uncover patterns and trends.