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### Program 2: Customer Order Processing

#### Business Case:

An e-commerce platform needs to process customer orders to identify pending orders, calculate the total value of orders, find the most popular products, and categorize customers based on their order values. The program demonstrates how to use the Stream API to perform these operations efficiently.

#### Program 2: Customer Order Processing

- **Objective:** To process customer orders by identifying pending orders, calculating total order value, determining popular products, categorizing customers, and verifying order value criteria.
- **Operations Used:**
  - `filter`: To find pending orders.
  - `mapToDouble`: To calculate the total order value.
  - `flatMap`: To aggregate all products from different orders.
  - `collect`: To group and categorize products and customers.
  - `allMatch`: To check if all orders are above a certain value.
- **Result:** The program helps the e-commerce platform efficiently process orders and derive important business insights.