

Question 4 Homework 5

1. **Selection:** Applies a filter on `OrderItems` for items with quantities greater than 100.
2. **Selection:** Applies a filter on `Customers` for those with the lastname 'Frumble'.
3. **Join:** Links `OrderItems` that passed the selection with `Orders` where the order IDs match.
4. **Join:** Connects the results from the previous join with `Customers` that passed the selection, matching on customer IDs.
5. **Projection:** Extracts `c.firstname`, `i.itemName`, and `o.orderDate` from the results.

This structure utilizes early application of selection operations to minimize the dataset size before performing joins, thereby optimizing the query processing efficiency. Each operation is methodically placed to ensure data relevance through the process, culminating in the extraction of specific attributes.