Name: Arshiya Tabassum A

Superset ID: 6424209

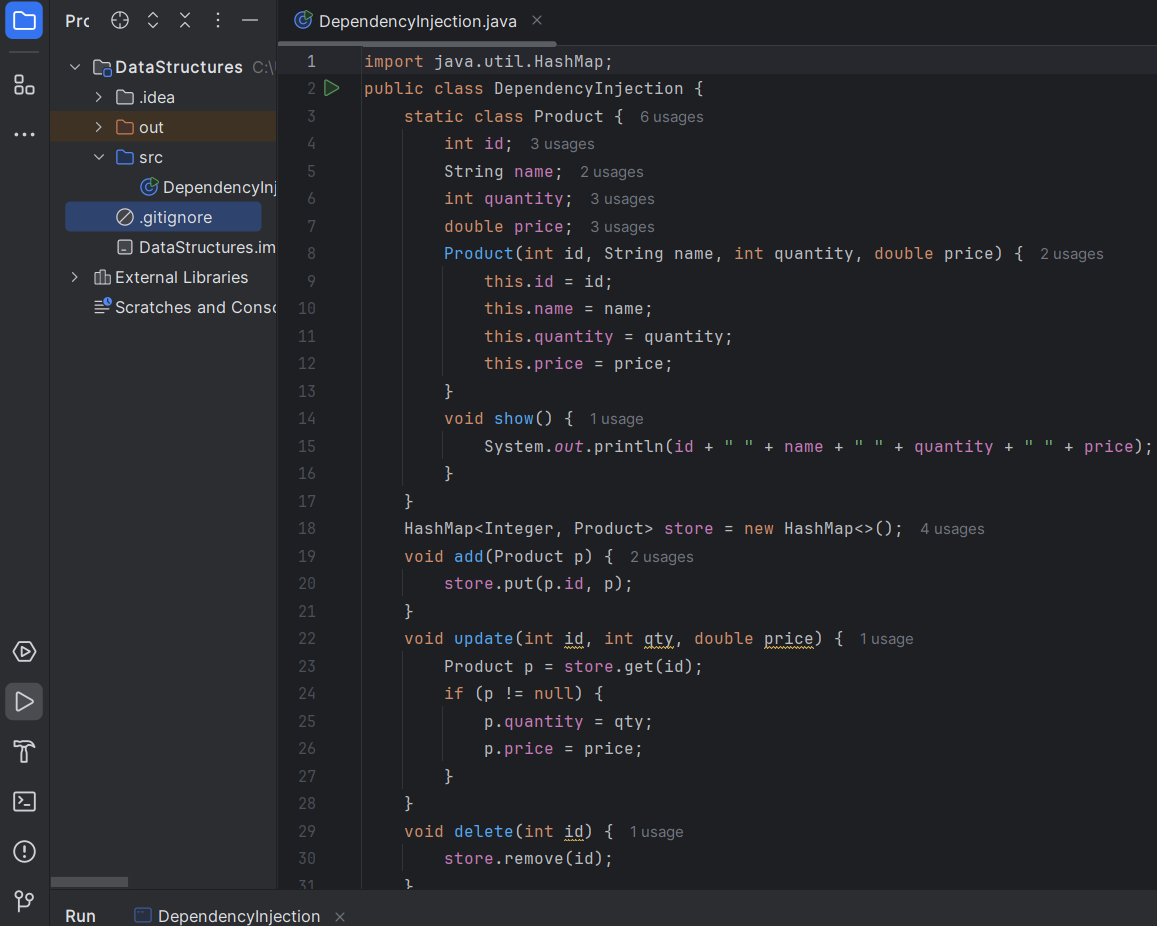
**WEEK 1**

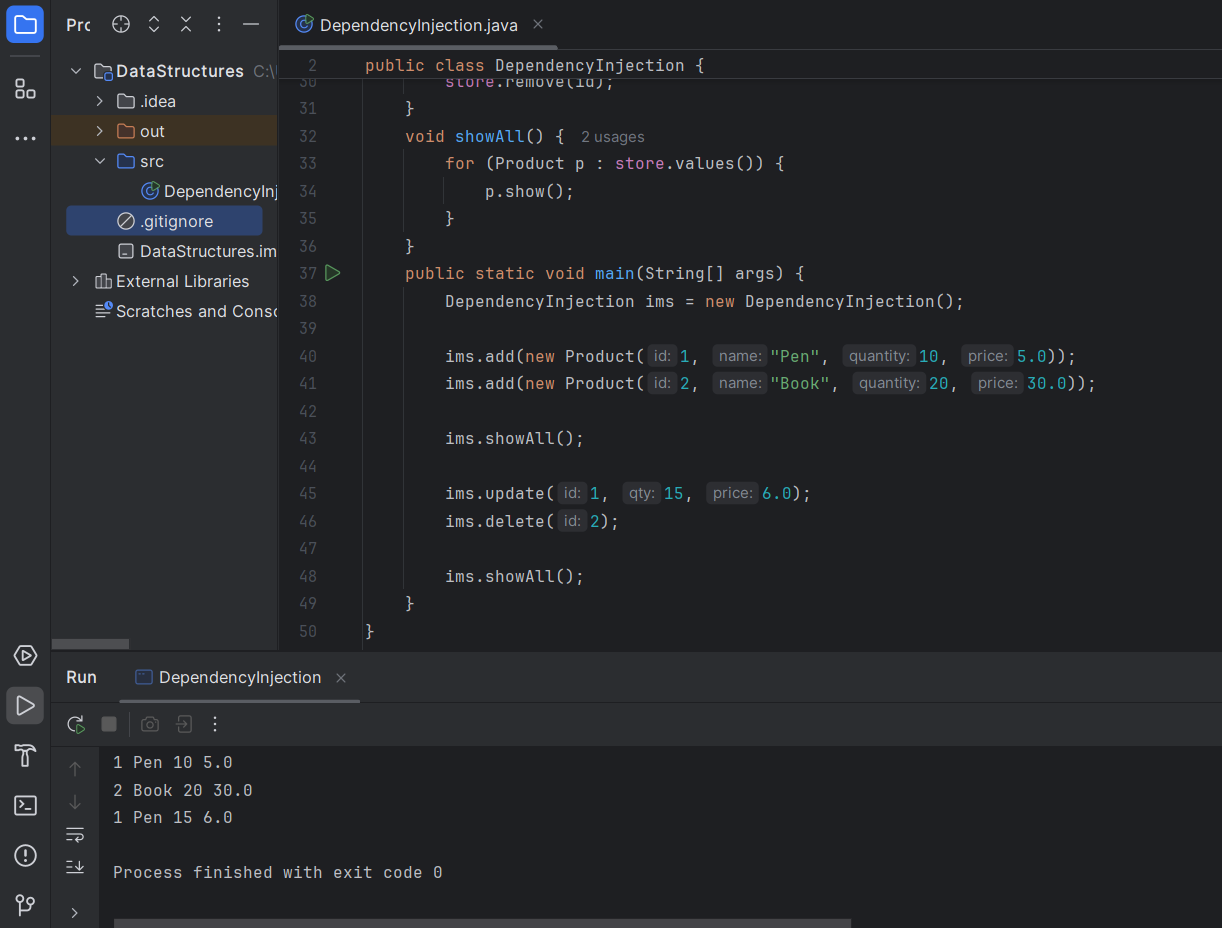
**Data Structures and Algorithm**

**Module 2**

Exercise 1: Inventory Management System

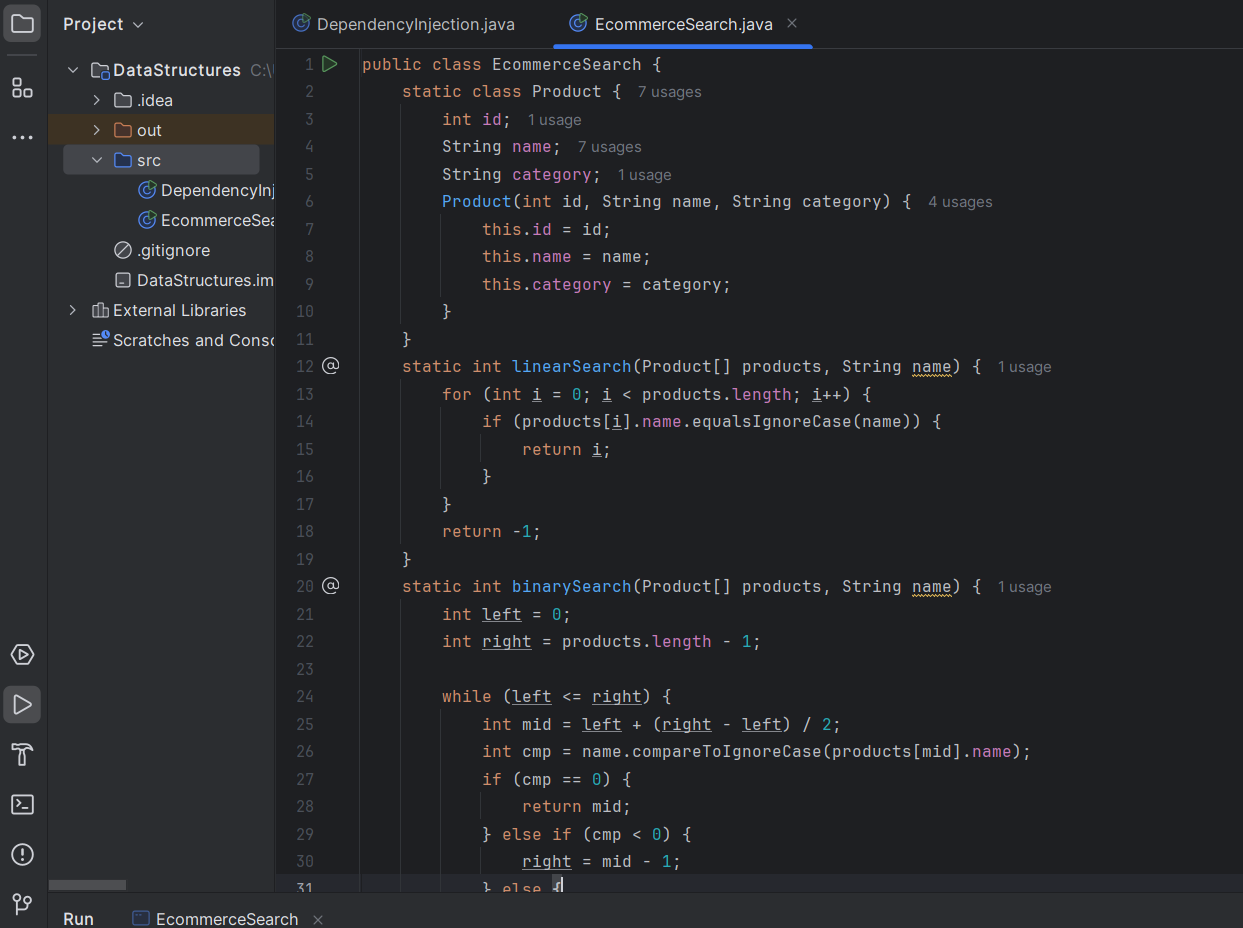
Scenario: You are developing an inventory management system for a warehouse. Efficient data storage and retrieval are crucial.

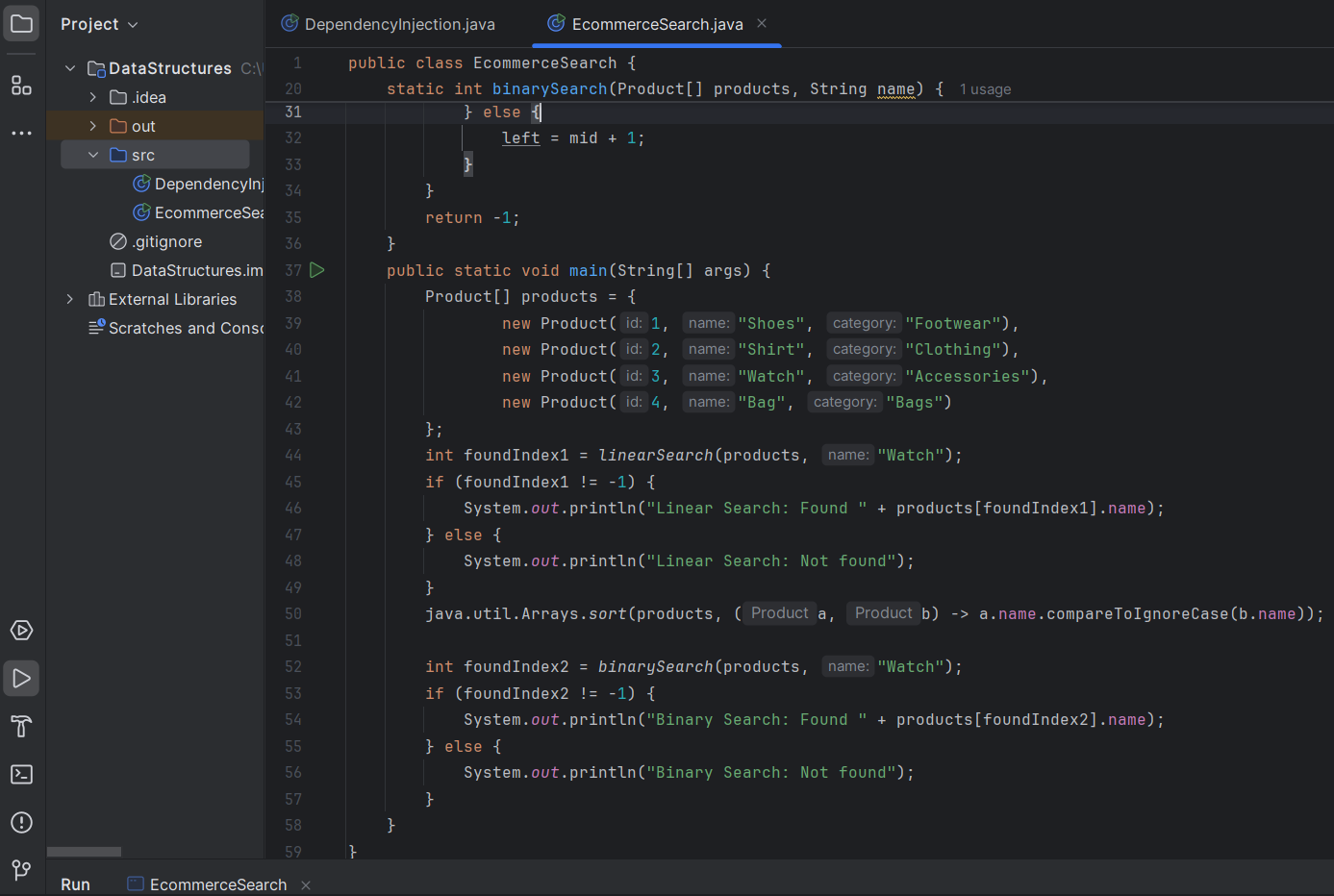


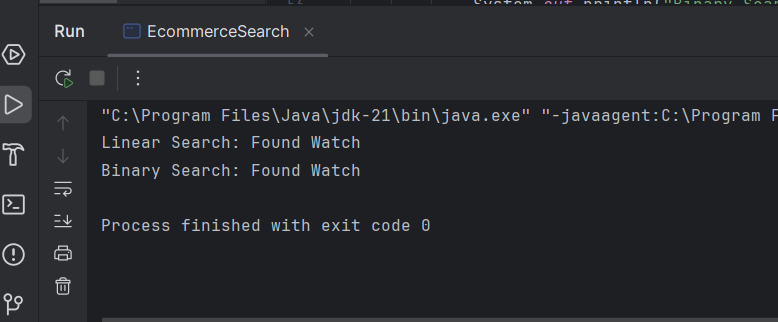


Exercise 2: E-commerce Platform Search Function

Scenario: You are working on the search functionality of an e-commerce platform. The search needs to be optimized for fast performance.

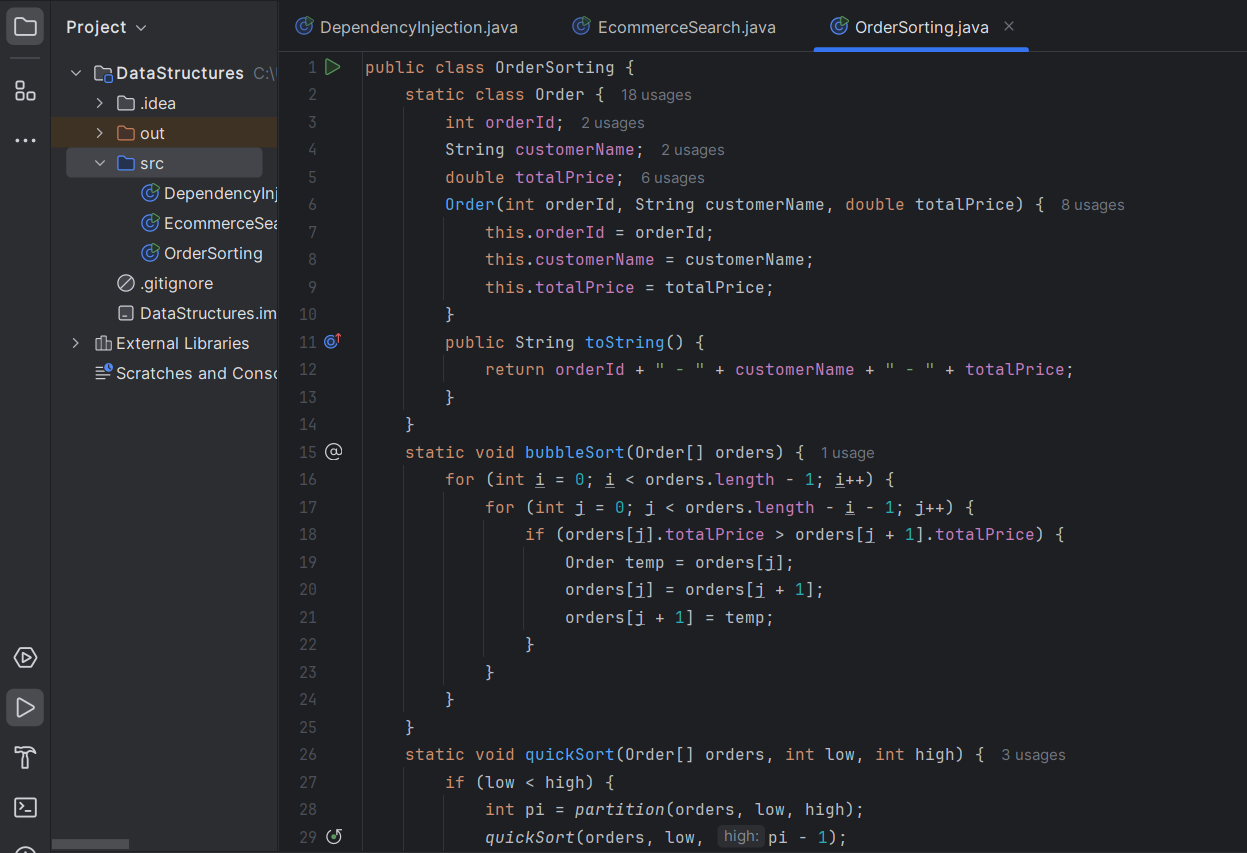


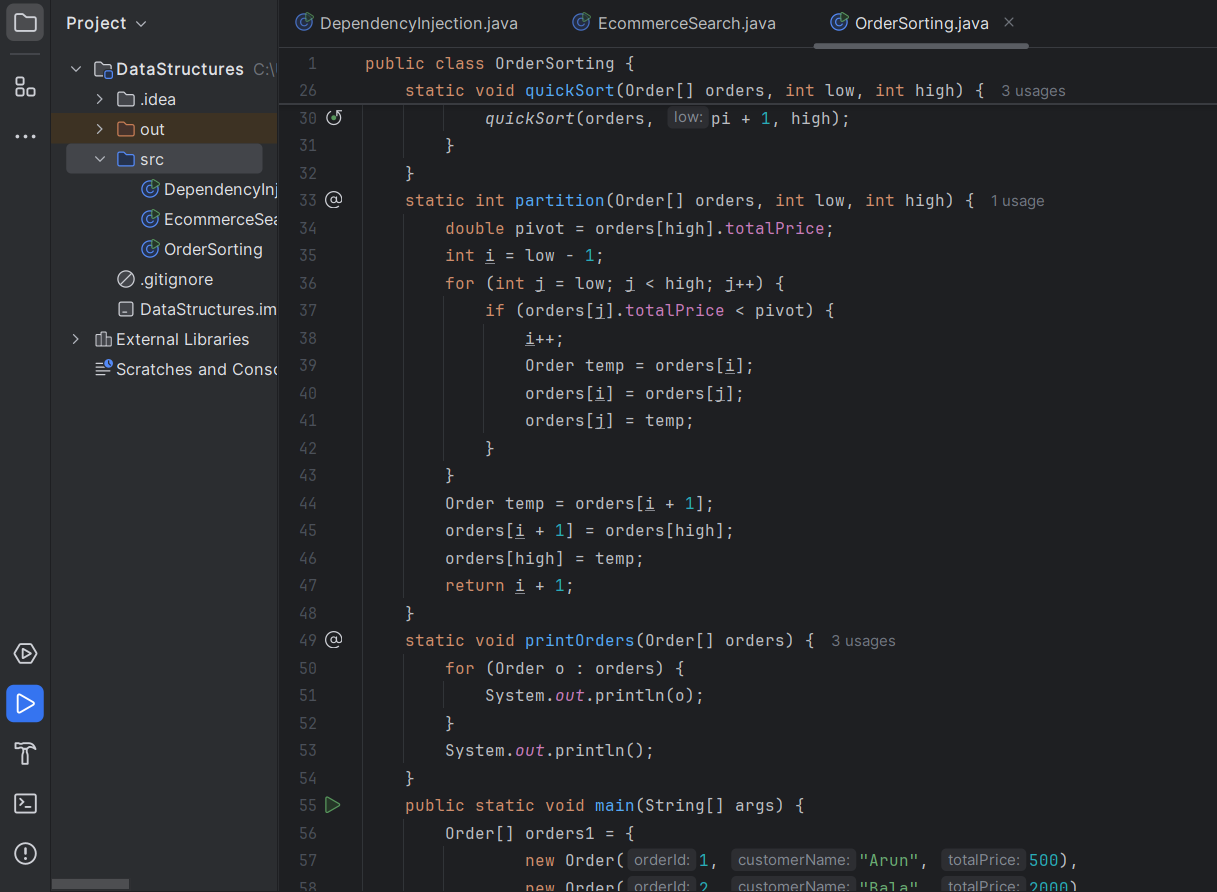


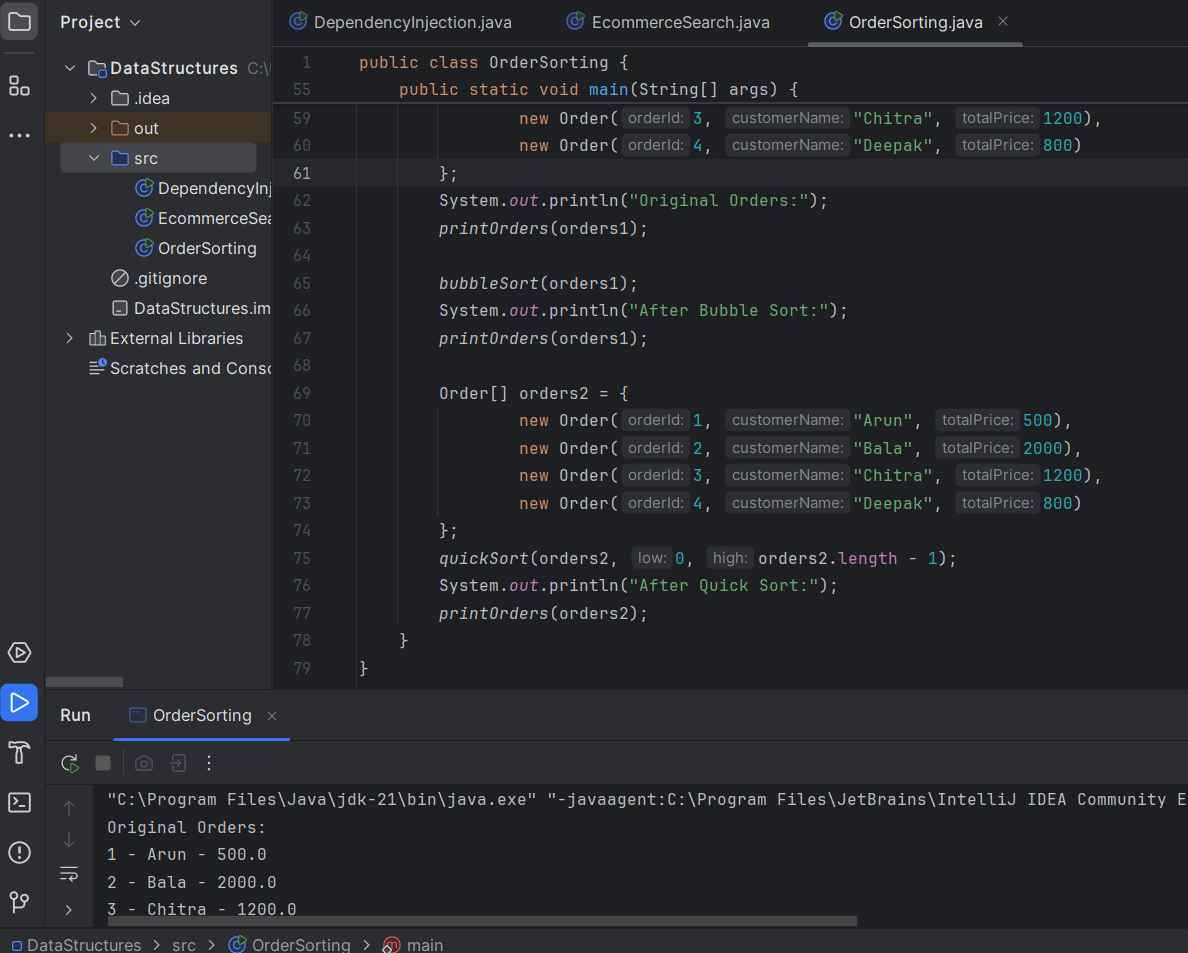


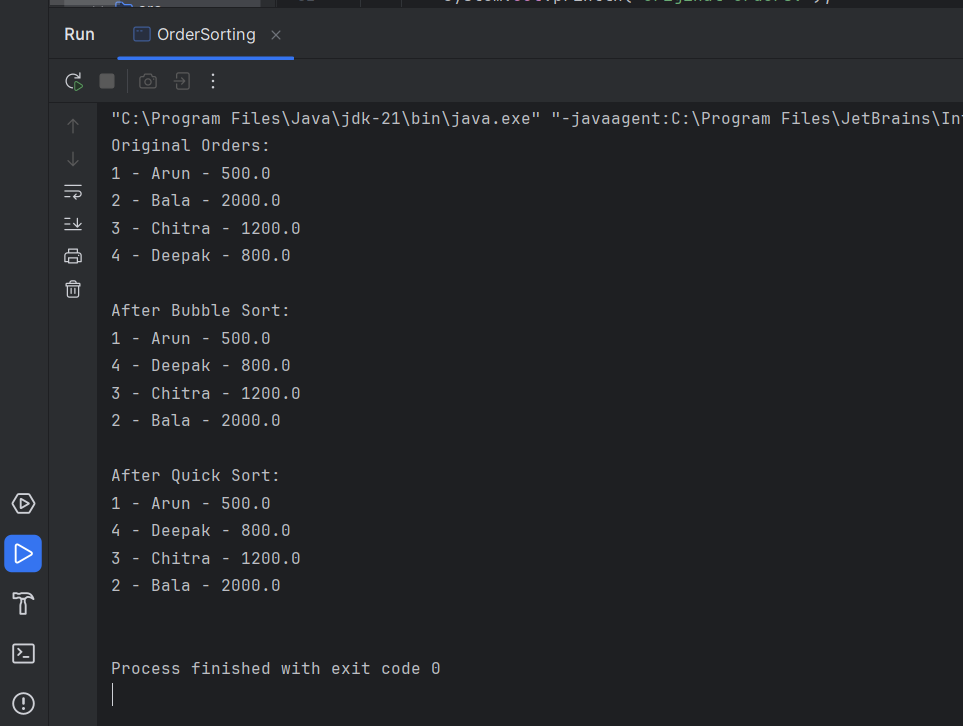
Exercise 3: Sorting Customer Orders

Scenario: You are tasked with sorting customer orders by their total price on an e-commerce platform. This helps in prioritizing high-value orders.



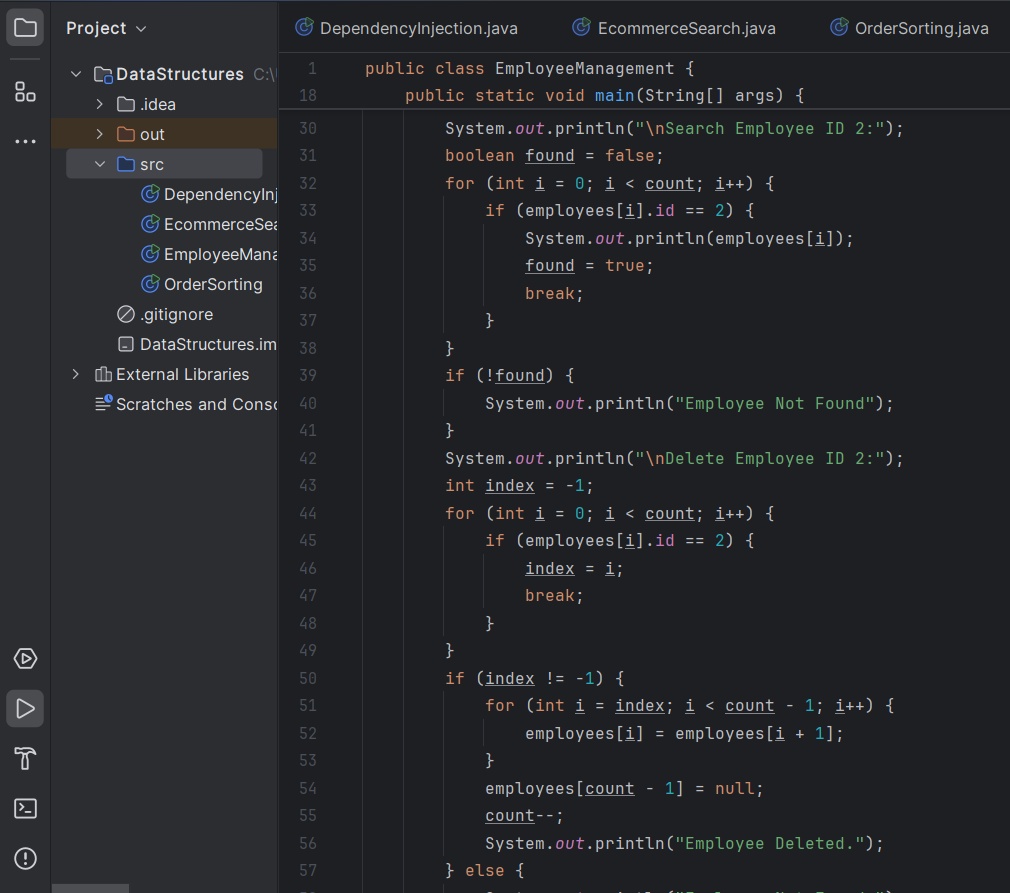
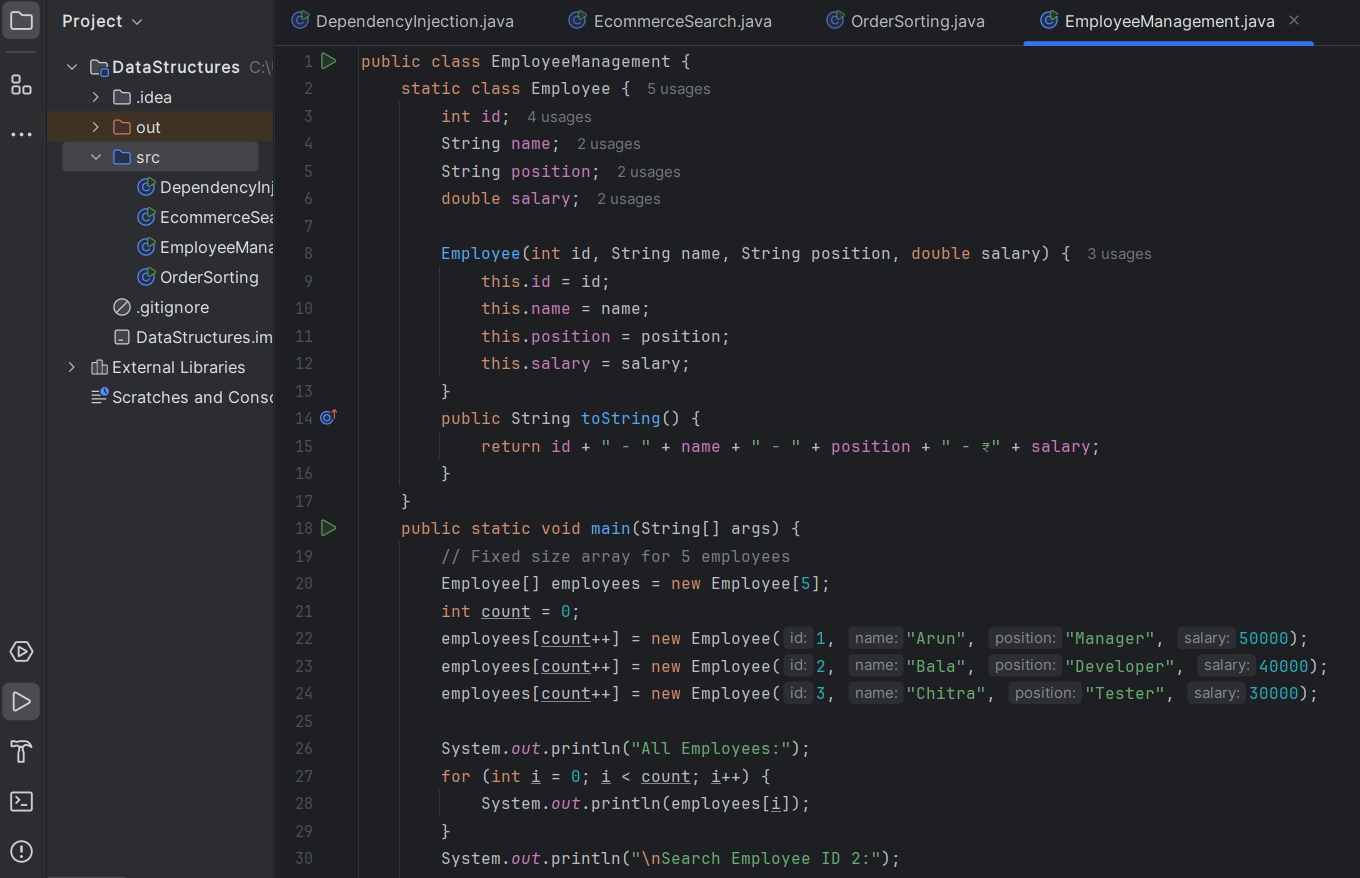
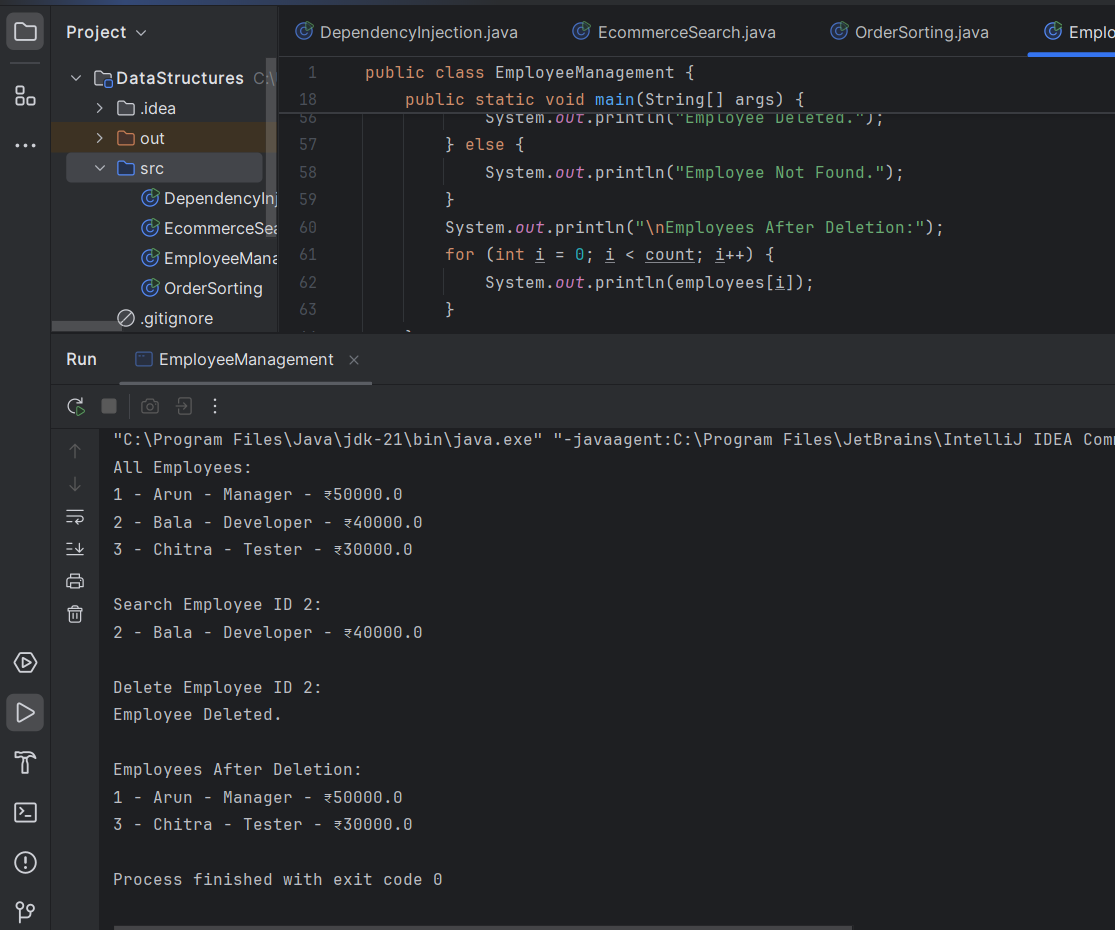




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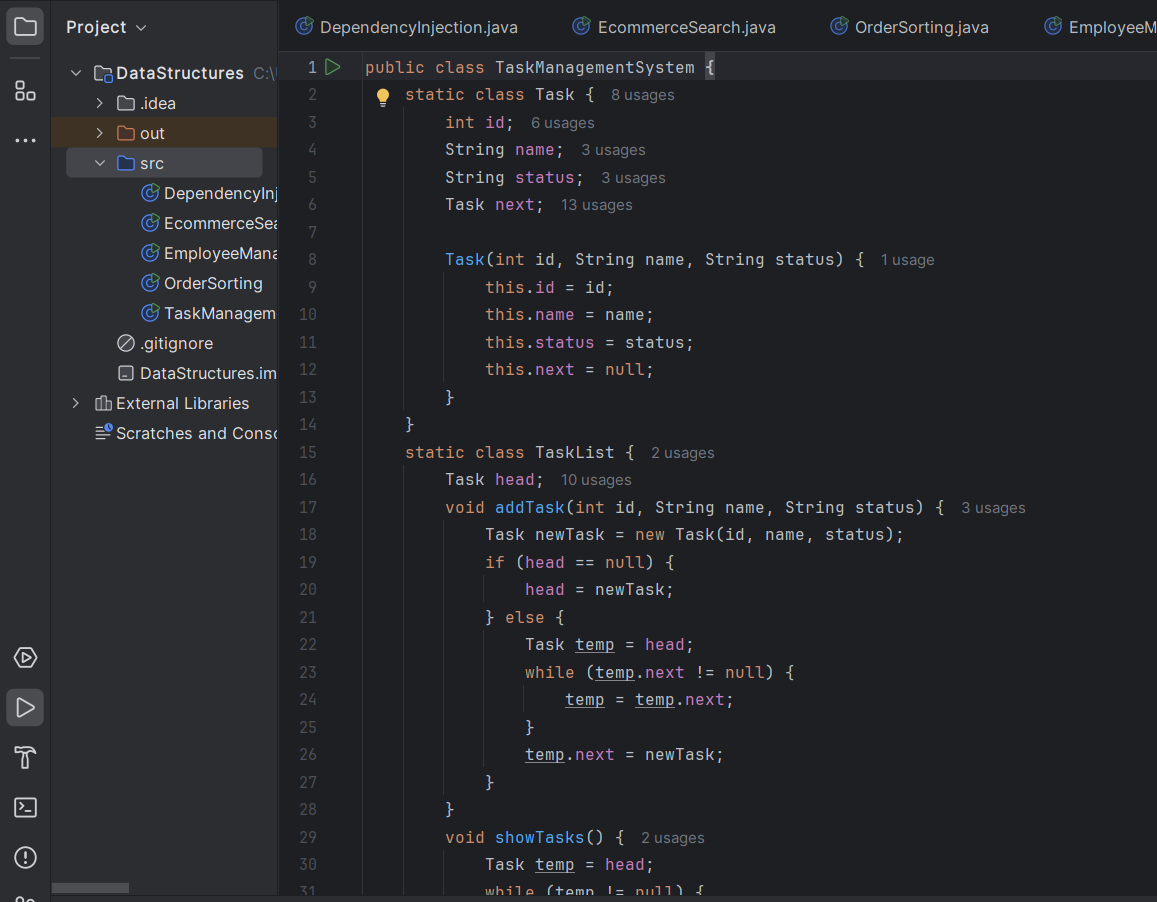
Exercise 4: Employee Management System

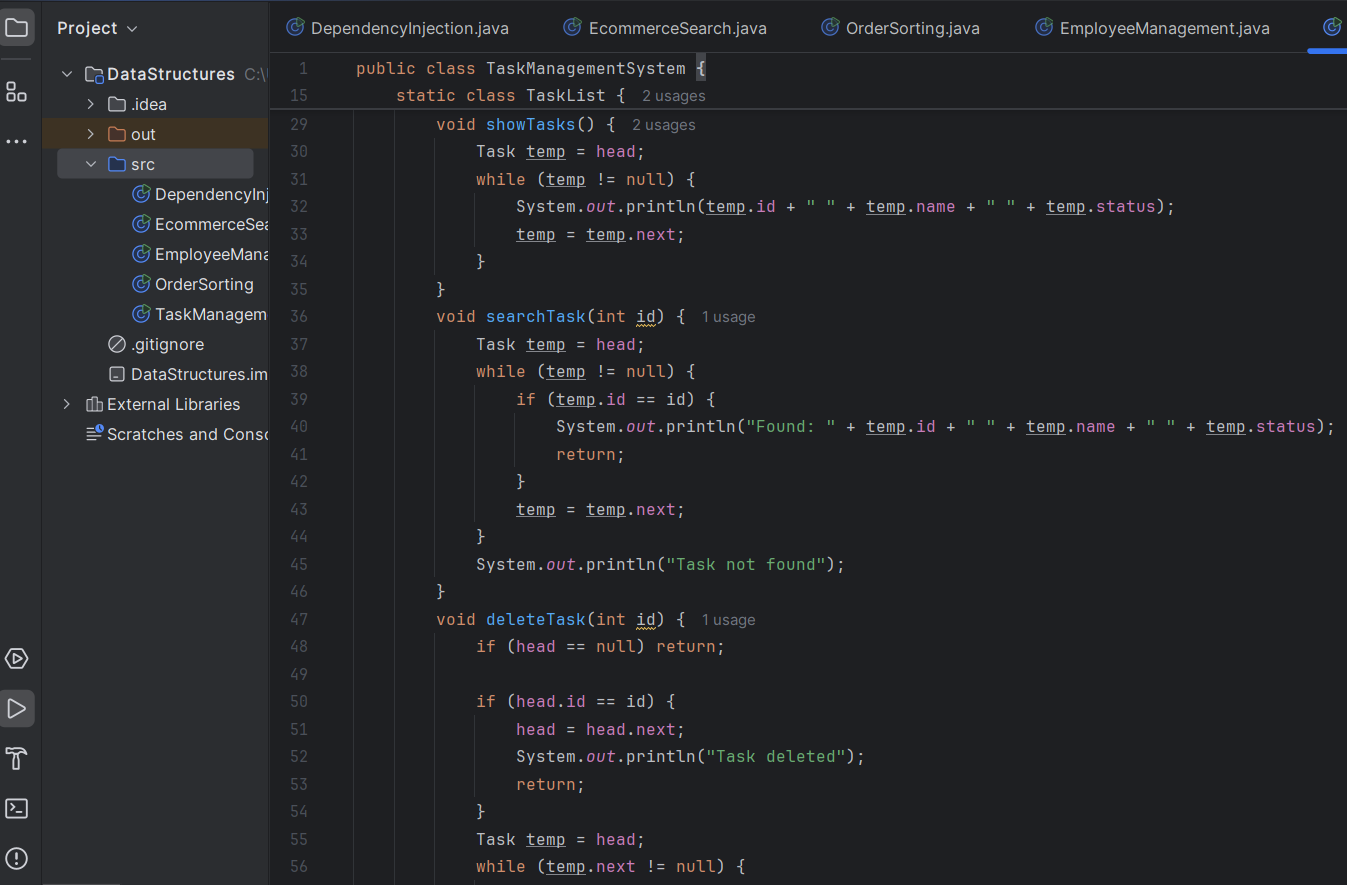
Scenario: You are developing an employee management system for a company. Efficiently managing employee records is crucial.

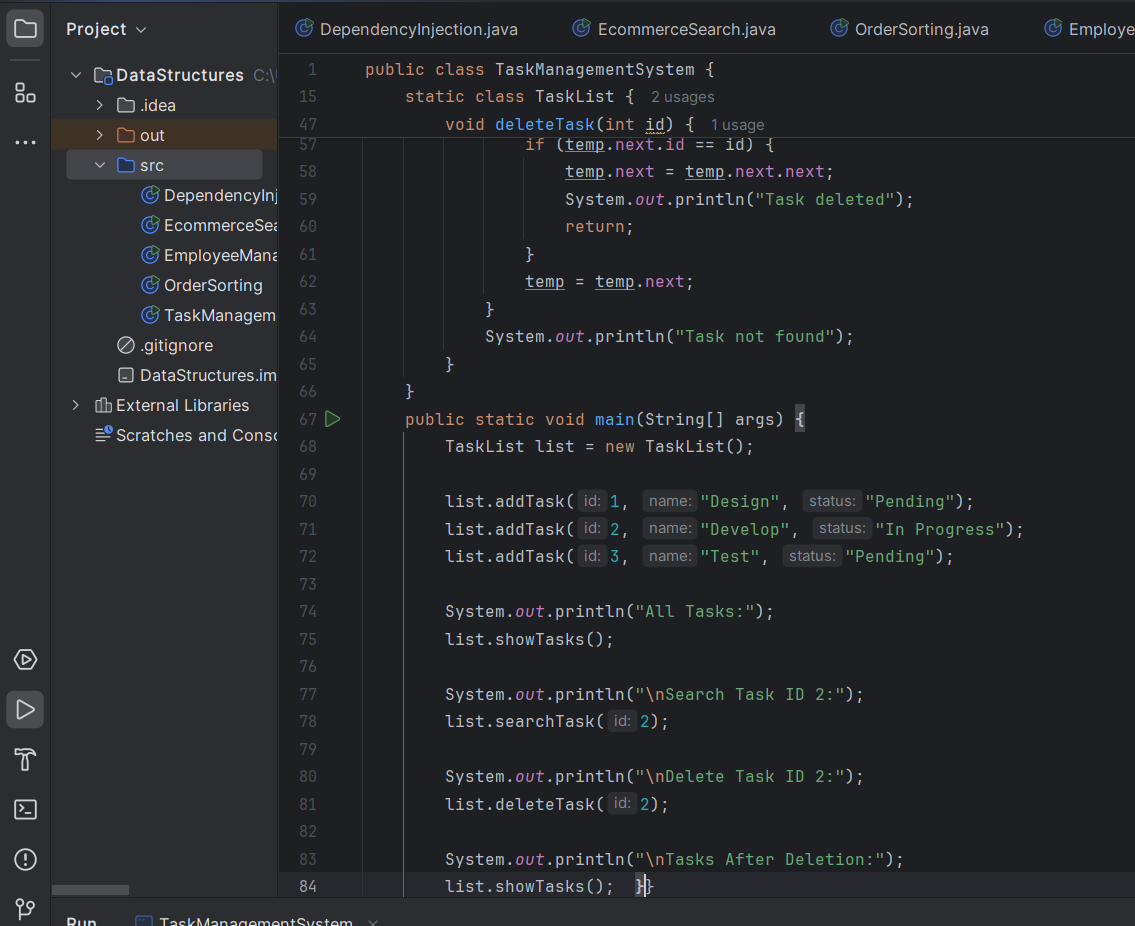
 

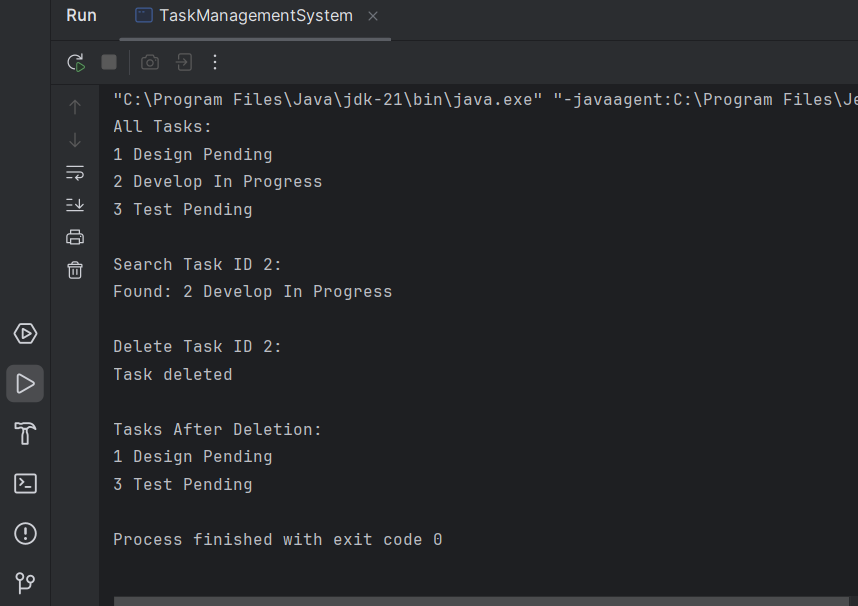
Exercise 5: Task Management System

Scenario: You are developing a task management system where tasks need to be added, deleted, and traversed efficiently.



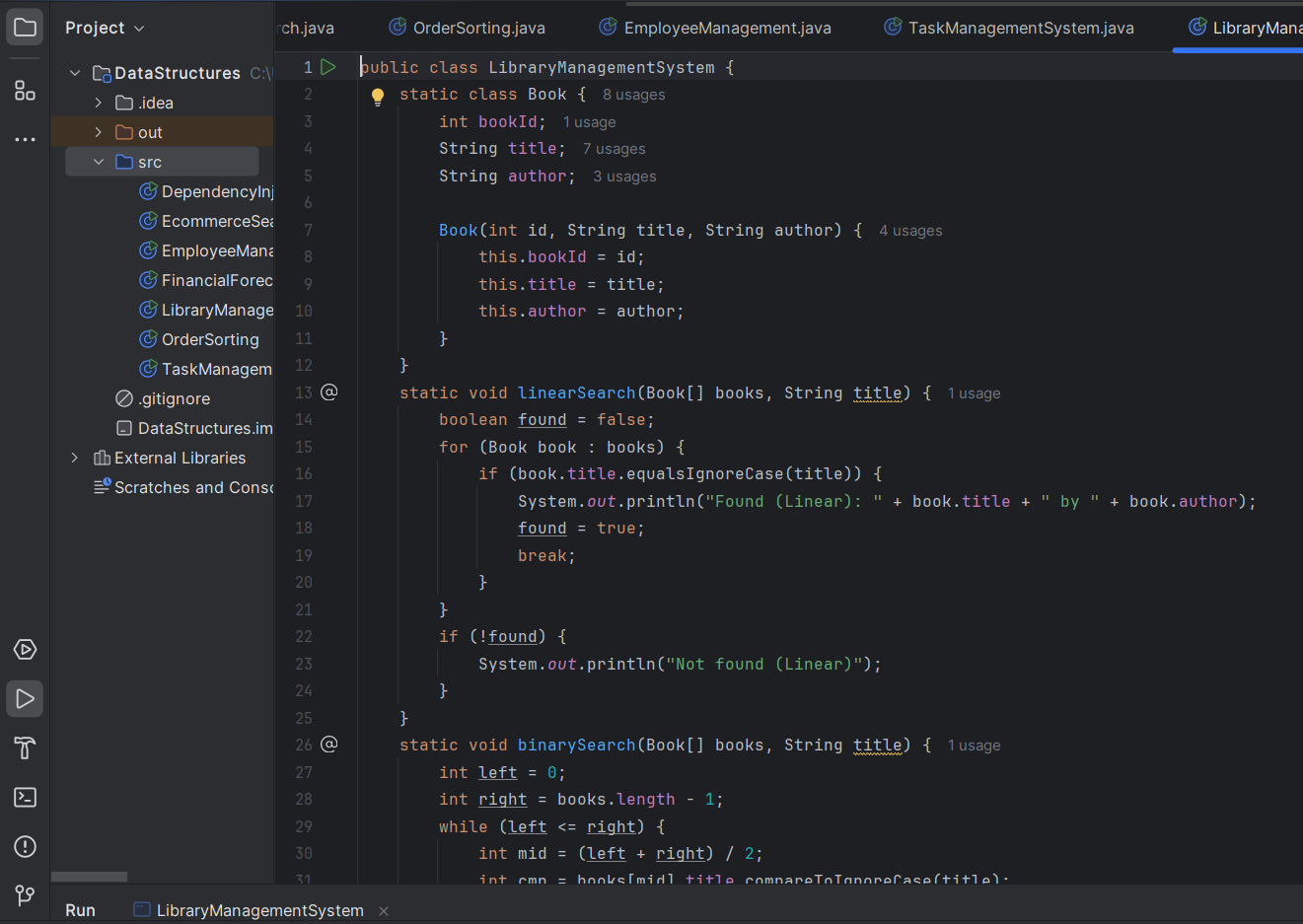


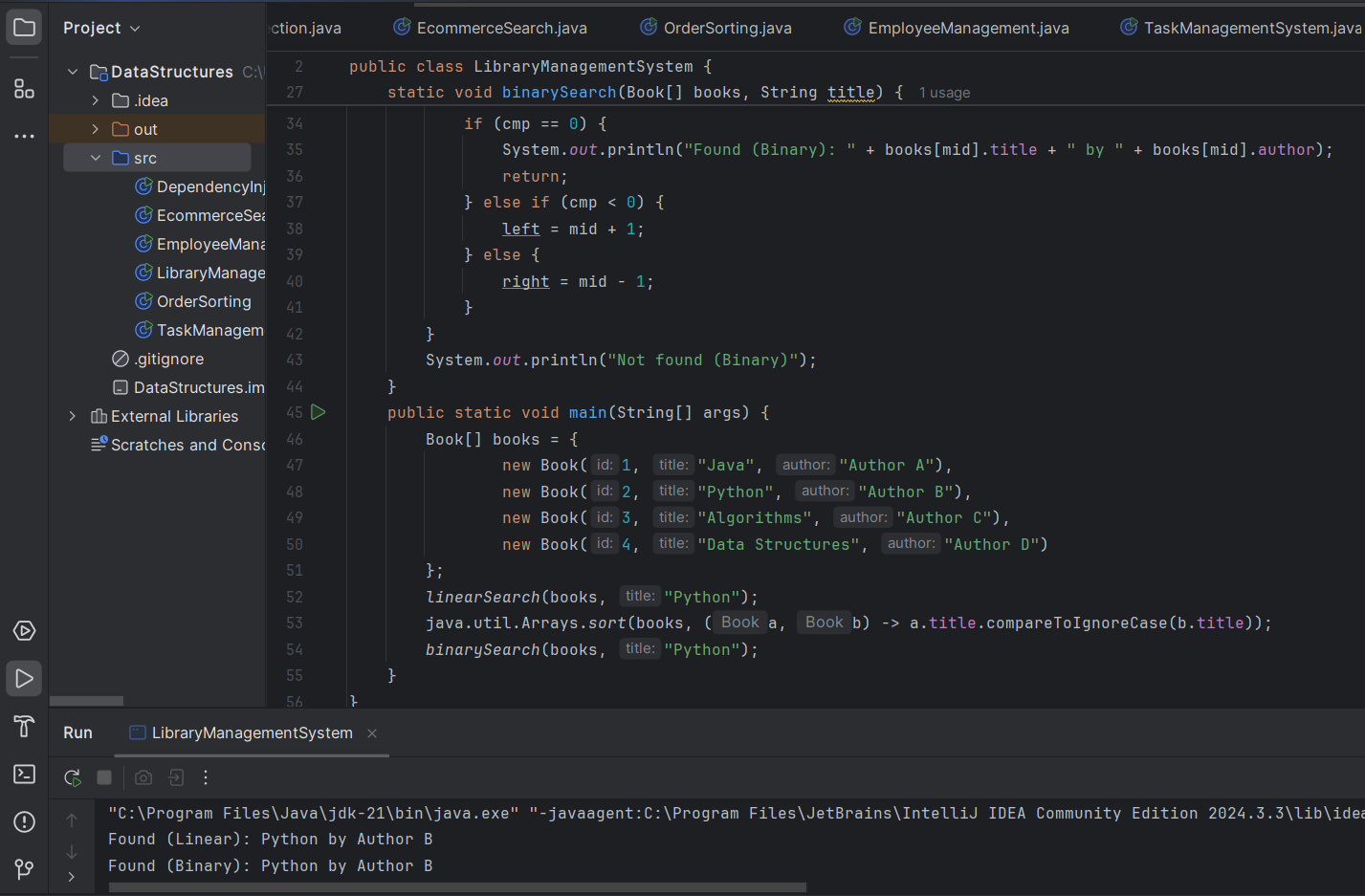




Exercise 6: Library Management System

Scenario: You are developing a library management system where users can search for books by title or author.





Exercise 7: Financial Forecasting

Scenario: You are developing a financial forecasting tool that predicts future values based on past data.

