Name:M.selvapriya  
superset id :6413004  
**Exercise 6: Library Management System**

Scenario:

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

Steps:

1. Understand Search Algorithms:

o Explain linear search and binary search algorithms.

2. Setup:

o Create a class Book with attributes like bookId, title, and author.

3. Implementation:

o Implement linear search to find books by title.

o Implement binary search to find books by title (assuming the list is sorted).

4. Analysis:

o Compare the time complexity of linear and binary search.

o Discuss when to use each algorithm based on the data set size and order.  
