**Collections :**

**Question-1:**

**Library Book Management:**

You are developing a **Java program** to manage a list of **book titles** in a public library. The program helps the librarian keep track of all the unique book titles currently available. To ensure that the book list remains unique and efficient to manage, the librarian has decided to use a **HashSet** to store the titles of the books.

**Input format:**

* The first line contains an integer **n**, representing the number of books.
* The next **n lines** contain the **titles** of the books (one per line).
* The following line contains a **string** representing the **title of the book to be searched**.
* The subsequent line contains a **string** representing the **title of the book to be removed** from the collection.

**Output format**:

Books in the Library:

<Each book title from the HashSet on a new line>

Search Result:

Book <searchTitle> found in the Library

or

Book <searchTitle> not found in the Library

Removal Result:

Book <removeTitle> removed from the Library

or

Book <removeTitle> not found in the Library

Updated Library:

Books in the Library after removal:

<Each remaining book title from the HashSet on a new line>

**Example Input**:

4

The Hobbit

1984

To Kill a Mockingbird

The Great Gatsby

1984

The Hobbit

**Example Output**:

Books in the Library:

To Kill a Mockingbird

The Great Gatsby

The Hobbit

1984

Search Result:

Book 1984 found in the Library

Removal Result:

Book The Hobbit removed from the Library

Updated Library:

Books in the Library after removal:

To Kill a Mockingbird

The Great Gatsby

1984

**Question 2:**

You are developing a **Java program** to manage a **catalog of books** in a digital library. Each book has the following details:

* **Title**
* **Author**
* **Genre**

The librarian wants to ensure that the catalog remains:

* **Unique** (no duplicate books based on Title),
* **Searchable** (by title),
* **Modifiable** (update genre),
* **Maintainable** (delete books by title).

To meet these requirements, you will use a HashSet of custom Book objects. Each Book object is uniquely identified by its **title** (i.e., no two books with the same title should exist).