

# Assignment 16 - ArrayList

## Problem Statement:

Create a program for managing books in a library using an `ArrayList`.

## Requirements:

1. **Add Books:** Add 5 book titles to the list.
2. **Display Books:** Print the total number of books and their titles.
3. **Search for a Book:** Allow the user to check if a specific book (input by the user) exists in the library.
4. **Remove a Book:** Remove a book from the library by its title (input by the user).
5. **Update the List:** Display the updated list of books after a book is removed.

## Instructions:

- Use an `ArrayList` to manage the books.
- Ensure proper handling of user input (e.g., check for empty lists or invalid titles before performing actions like removal).
- Include comments in your code for better readability.

## Example Input/Output:

```
Books in the Library:
```

- ```
1. The Catcher in the Rye
2. To Kill a Mockingbird
3. 1984
4. Pride and Prejudice
5. The Great Gatsby
```

```
Enter a book title to search: 1984
```

```
Output: The book "1984" exists in the library.
```

```
Enter a book title to remove: 1984
```

Output: The book "1984" has been removed.

Updated List of Books:

1. The Catcher in the Rye
2. To Kill a Mockingbird
3. Pride and Prejudice
4. The Great Gatsby

### **Submission Guidelines:**

- Submit the Java file and a text file containing sample input/output for the program.
- Ensure your code is well-commented and formatted for readability.

Good luck!