## **Book Manipulation**

The district central library needs an application to store book details of their library. The clerk who has all the rights to add a new book,search for any book,display the book details and should update the count of total number of books.

You are provided with a Book with the following private attributes:

- int isbnno
- String bookName
- String author

Needed getters and setters are written.

Create a class Library with the following private attribute:

- ArrayList<Book> bookList = new ArrayList<Book>();
- Also provide the necessary setter and getter methods.

Include the following public methods:

- 1. void addBook(Book bobj) This method should add the book object to the booklist.
- 2. boolean isEmpty() This method should return true if the booklist is empty else return false
- 3. ArrayList<Book> viewAllBooks() This method should return the list of books maintained in the library.
- 4. ArrayList<Book> viewBooksByAuthor(String author) This method should return a list of books written by the author passed as argument. When you display an empty list it should print the message "The list is empty".
- 5. int countnoofbook(String bname) this method should return the count of books with the name passed as argument.

Write a Main class to test the above functionalities.

## **Sample Input and Output 1:**

- 1.Add Book
- 2. Display all book details
- 3. Search Book by author
- 4. Count number of books by book name

5.Exit

Enter your choice:

1

Enter the isbn no:

123

Enter the book name:

Java

Enter the author name:

Bruce Eckel

- 1.Add Book
- 2. Display all book details

- 3. Search Book by author
- 4. Count number of books by book name
- 5.Exit

Enter your choice:

1

Enter the isbn no:

124

Enter the book name:

C++

Enter the author name:

Eric Nagler

- 1.Add Book
- 2.Display all book details
- 3. Search Book by author
- 4. Count number of books by book name

5.Exit

Enter your choice:

3

Enter the author name:

Henry

None of the book published by the author Henry

- 1.Add Book
- 2.Display all book details
- 3. Search Book by author
- 4. Count number of books by book name

5.Exit

Enter your choice:

3

Enter the author name:

Eric Nagler ISBN no: 124 Book name: C++

Author name: Eric Nagler

- 1.Add Book
- 2.Display all book details
- 3. Search Book by author
- 4. Count number of books by book name

5.Exit

Enter your choice:

5