

```
1 import com.eisgroup.javaexam.library.Book;
2 import com.eisgroup.javaexam.library.Library;
3
4 import java.util.*;
5
6 public class LibraryImpl implements Library {
7
8     List<Book> books = new ArrayList<>();
9
10    @Override
11    public void takeABook(Book book) {
12        if (!books.contains(book)) {
13            books.add(book);
14        }
15    }
16
17    @Override
18    public int getNumberOfBooks() {
19        return books.size();
20    }
21
22    @Override
23    public Book findByTitle(String title) {
24        for (Book book : books) {
25            if (book.getTitle().equals(title)) {
26                return book;
27            }
28        }
29        return null;
30    }
31
32    @Override
33    public Collection<Book> findByAuthor(String author) {
34
```

```
35 List<Book> booksByAuthor = new ArrayList<>();
36
37 for (Book book : books) {
38     if (book.getAuthor().equals(author)) {
39         booksByAuthor.add(book);
40     }
41 }
42 return booksByAuthor;
43 }
44
45 @Override
46 public Collection<Book> getBooksSortedByPageCount() {
47     Comparator<Book> sortByPageCount = Comparator.comparing(Book::getPageCount);
48     Collections.sort(books, sortByPageCount);
49     return books;
50 }
51 }
52
```