import java.util.ArrayList;

import java.util.Scanner;

class Book {

String title, author;

boolean isIssued;

Book(String title, String author) {

this.title = title;

this.author = author;

this.isIssued = false;

}

}

public class LibraryManagementSystem {

static ArrayList<Book> books = new ArrayList<>();

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

boolean running = true;

while (running) {

System.out.println("\nLibrary Management System");

System.out.println("1. Add Book");

System.out.println("2. View Books");

System.out.println("3. Issue Book");

System.out.println("4. Return Book");

System.out.println("5. Exit");

System.out.print("Choose an option: ");

int choice = sc.nextInt();

sc.nextLine(); // consume leftover newline

switch (choice) {

case 1:

addBook(sc);

break;

case 2:

viewBooks();

break;

case 3:

issueBook(sc);

break;

case 4:

returnBook(sc);

break;

case 5:

running = false;

System.out.println("Exiting system...");

break;

default:

System.out.println("Invalid choice!");

}

}

sc.close();

}

static void addBook(Scanner sc) {

System.out.print("Enter book title: ");

String title = sc.nextLine();

System.out.print("Enter author name: ");

String author = sc.nextLine();

books.add(new Book(title, author));

System.out.println("Book added successfully!");

}

static void viewBooks() {

if (books.isEmpty()) {

System.out.println("No books available.");

return;

}

for (Book book : books) {

System.out.println("Title: " + book.title + ", Author: " + book.author + ", Issued: " + (book.isIssued ? "Yes" : "No"));

}

}

static void issueBook(Scanner sc) {

System.out.print("Enter book title to issue: ");

String title = sc.nextLine();

for (Book book : books) {

if (book.title.equalsIgnoreCase(title)) {

if (!book.isIssued) {

book.isIssued = true;

System.out.println("Book issued successfully!");

return;

} else {

System.out.println("Book is already issued.");

return;

}

}

}

System.out.println("Book not found!");

}

static void returnBook(Scanner sc) {

System.out.print("Enter book title to return: ");

String title = sc.nextLine();

for (Book book : books) {

if (book.title.equalsIgnoreCase(title)) {

if (book.isIssued) {

book.isIssued = false;

System.out.println("Book returned successfully!");

return;

} else {

System.out.println("This book was not issued.");

return;

}

}

}

System.out.println("Book not found!");

}

}