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package assignments;

import java.util.Scanner;

public class BookDatabase {

    private String[] isbnArray;

    public BookDatabase(int size ) {
        isbnArray = new String[size];
    }

    public boolean validateISBN(String isbn ) {

        if (isbn.length() != 10 && isbn.length() != 13 ) {

            return false;

        }

        for (int i = 0; i < isbn.length(); i++) {
            if (!Character.isDigit(isbn.charAt(i)) && isbn.charAt(i) != '-' ) {

                return false;
            }
        }

        return true;
    }

    public boolean searchISBN(String isbn) {

        for (String validISBN : isbnArray) {
            if (validISBN != null && validISBN.equals(isbn)) {
                return true;
            }
        }
        return false;
    }

    public void addBook(String isbn) {
        for (int i = 0; i < isbnArray.length; i++) {
            if (isbnArray[i] == null) {

                isbnArray[i] = isbn;

                break;
            }
        }
    }

    public void printAllISBNs() {

        for (String isbn : isbnArray) {
            if (isbn != null) {

                System.out.println(isbn);
            }
        }
    }

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in );
        System.out.print("Enter the size of the database ");

        int size = scanner.nextInt() ;
        scanner.nextLine();

        BookDatabase database = new BookDatabase(size);

        while (true) {
            System.out.print ("Enter ISBN to validate (or 'exit' to quit)");

            String isbn = scanner.nextLine();

            if (isbn.equals("exit")) {

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        break ;
    }

    if (database.validateISBN(isbn)) {

        System.out.println("ISBN is valid.");
        if (!database. searchISBN(isbn)) {

            System.out.println("ISBN not found in database. Adding it...");

            database.addBook (isbn);
        }
    } else {

        System.out.println("wrong ISBN");

    }
}

System.out.println("\nAll ISBNs in database:");

database.printAllISBNs();


scanner.close();
}
```