

Library Management System (Python)

This is a simple **Library Management System** written in Python.

It allows users to **add, view, search, issue, and return books** using a menu-driven command-line interface.

Features

1. Add Book

- User enters *title* and *author*
- Book is saved with status **Available**

2. View All Books

- Displays all books stored in the library
- Shows title, author, and current status (Available/Issued)

3. Search Book

- Search for a book by its title
- Case-insensitive search

4. Issue Book

- Issues a book if its status is **Available**
- Changes status to **Issued**

5. Return Book

- Returns a previously issued book
- Status changes back to **Available**

6. Exit

- Ends the program
-

How It Works

The system stores all books in a list of dictionaries:

```
library = [  
    {"title": "Book Name", "author": "Author Name", "status": "Available"}  
]
```

Each option from the menu calls a specific function to perform an action.

Code Structure

| Function | Purpose |
|-------------------------------|----------------------------------|
| <code>add_book()</code> | Adds new book to the library |
| <code>view_books()</code> | Shows all books |
| <code>search_book(k())</code> | Searches book by title |
| <code>issue_book()</code> | Issues a book |
| <code>return_book(k())</code> | Returns issued book |
| Main Loop | Displays menu & takes user input |

How to Run

1. Install Python (if not installed)
2. Save the file as `library.py`
3. Open terminal / CMD
4. Run:

```
python library.py
```

Future Improvements (if needed)

- Save data in a file (JSON or CSV)
- Add login system for admin & users
- Add book categories, IDs
- Show history of issued books

Contributing

Feel free to fork this repository and submit a pull request if you want to add features!

License

This project is free to use and modify for learning purposes.