**OVERVIEW**  
In this assignment, you’re gonna have to develop a CLI project with Python for a Library  
Management System. You’ll have to use the concepts of Python you’ve already learned  
throughout the course. You won’t have to use any GUI or any Framework or such. Simply run the  
application and show your output in the terminal. Don’t use AI. It’ll be harmful to your career

**TASKS**  
1. Books can be added to the system. Use at least the title, author(s), ISBN, publishing year,  
price, and quantity. You can use any extra fields you find necessary.  
2. The system should be able to take multiple authors for a single book.  
3. View all the books in the list. Use any format you feel comfortable with. Good-looking  
output would be much appreciated.  
4. Search for books by title or ISBN. Users should be able to enter a simple search term and  
find all the books with titles or ISBNs containing that search term. The user shouldn't  
select which one to search for.  
5. Search books by authors. Users will search by author name and get the output containing  
all the books whose author name contains the search term.  
6. Remove a book by searching and selecting.  
7. The books can be lent to someone. When it is lent to someone, the quantity of books  
should be decreased.  
8. If no books are available to lend, an error message should be printed saying not enough  
books available to lend.  
9. View all the books that were lent and who lent the book.  
10. Books can be returned. The quantity should be updated accordingly.  
11. Save the book state(added books, lent books, etc.) to a file(any file you wish).  
12. When a book is added or removed, it should be automatically saved into a file.  
13. When a book is lent or returned, the info should be saved to the file.  
14. All the information should be available from the saved file when the program starts.

15. If a functionality isn’t working, the program should show a proper error message. For  
example:  
a. The book price should be a floating number  
b. This book isn’t available to remove.  
c. etc…

**NOTES**  
1. The project must contain multiple files for multiple features.  
2. You must add a simple architecture for the application using any tool you prefer. You can  
also draw in hand and put that image into the project folder. Better, if you can show your  
plans drawing and such.  
3. The features must be contained within functions.  
4. You mustn’t use any 3rd party library for this project. Use only the basic Python  
knowledge you’ve learned so far from this course.  
5. Use an infinite menu with an exit option to make the application user-friendly. All the  
features must be usable from the menu.