Create a library management application on the Command Line which will follow the following protocol.

User is first presented the following options:

**MAIN:**

Welcome to the SS Library Management System. Which category of a user are you

1. Librarian
2. Administrator
3. Borrower

<take input>

Based on what the user selects, the following prompts will appear to fit his role:

**LIBRARIAN**

**LIB1:**

1. Enter Branch you manage
2. Quite to previous **(should take you menu MAIN)**

<take input>

For Option 1, Give a list of Library branches using the names or locations like this:

**LIB2:**

1. University Library, Boston
2. State Library, New York
3. Federal Library, Washington DC
4. County Library, McLean VA
5. Quit to previous **(should take you menu LIB1)**

<take input>

The user will only pick the number in the above list and you should figure out which branch he is referring.

Based on the selection, the next list would be:

**LIB3:**

1. Update the details of the Library
2. Add copies of Book to the Branch
3. Quit to previous **(should take you menu LIB2)**

<take input>

**Option 1** should update **library\_branch** table for the branch he had picked before. This should be like:

You have chosen to update the Branch with Branch Id: X and Branch Name: ABCD. **Enter ‘quit’ at any prompt to cancel operation.**

Please enter new branch name or enter N/A for no change:

<take input>

Please enter new branch address or enter N/A for no change:

<take input>

Then update the values for this branch and say successfully updated. Then go back to menu **LIB3,** to start over again.

**Option 2** should give further options like this:

Pick the Book you want to add copies of, to your branch:

1. Lost Tribe by Sidney Sheldon
2. The Haunting by Stepehen King
3. Microtrends by Mark Penn
4. Quit to cancel operation

<take input>

Existing number of copies: N **(if none show zero)**

Enter new number of copies:

<take input>

Then you should update the book\_copies table with the new values. Then take the user back to **LIB3.**

**BORROWER**

**Enter the your Card Number:**

**<take input>**

**Don’t let borrower to proceed until he gives valid card number.**

**BORR1:**

1. Check out a book
2. Return a Book
3. Quit to Previous **(should take you menu MAIN)**

**Option 1** should show the following options

Pick the Branch you want to check out from:

1. University Library, Boston
2. State Library, New York
3. Federal Library, Washington DC
4. County Library, McLean VA
5. Quit to previous **(should take you menu BORR1)**

Pick the Book you want to check out **(make sure you only show books that have atleast one copy in BOOK\_COPIES in the branch picked)**

1. Lost Tribe by Sidney Sheldon
2. The Haunting by Stepehen King
3. Microtrends by Mark Penn
4. Quit to cancel operation **(should take you menu BORR1)**

**Then add entry into book\_loans, date out should be today’s date, due date should be one week from today’s date.**

**Implement the return book functionality the same way as above.**

**Also implement the following ADMINISTRATOR functions: (CRUD Operations)**

1. **Add/Update/Delete/Read Book and Author**
2. **Add/Update/Delete/Read Genres**
3. **Add/Update/Delete/Read Publishers**
4. **Add/Update/Delete/Read Library Branches**
5. **Add/Update/Delete/Read Borrowers**
6. **Over-ride Due Date for a Book Loan**

**Show all books in LMS:**

**Title.**

**Who wrote this book.**

**What Genre this book belongs to**

**Who is the publisher.**

1. **Add Book**
   1. **Title:**
   2. **List the Authors in your Library**

**1.**

**2.**

**…**

* 1. **User picks one or more Author.**
  2. **List of Genres in your library**

**1.**

**2.**

**..**

* 1. **User picks one or more Genre.**
  2. **List of publishers.**
  3. **Users picks one Publisher**

**Insert on tbl\_book - bdao**

**Insert into tbl\_book\_authors – bdao/adao**

**Insert into tbl\_book\_genres – bdao-gdao**

**Exception – terminated.**

**Insert into tbl\_book\_branches - bdao**

**Insert into tbl\_book\_copies - copiesdao**

**Transaction**