

# <u>Mini Project – SQL</u>

## **Domain: Library Management System**

The concept behind this project is to create a library management system that is capable of issuing books and let consumers check different books and their titles categorically. It keeps track of all the details about the books in the library, their price, status, and the total number of books available in the Library. The user will find this automated system easy instead of using the manual writing system.

#### Features needed -

- It has to be user-friendly
- You can effortlessly create it in with SQL queries become handy in extracting the required information
- The Library Management System should have an entry for each book along with the details.

In this project, you have to build the database from scratch by using all the languages in SQL. First, you have to create your own schema with the name **Library Management System** and start creating a table as per they require Here I share a table and the details.

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Publisher	Book	Library Branch
Publisher name [v]{p}	book id [n]{p}	branch id [n]{p}
publishe adress [v]	book title [v]	branch name [v]
publisher pnone no [n]	book publisher name [v]{f}	branch address [v]

Borrower	Loans	Copies	Author
Card no [n]{p}	loans id [n]{p}	copies id [n]{p}	author id [n]{p}
Borrower address [v]	book id [n]{f}	book id [n]{f}	book id [n]{f}
Borrower phone no [n]	branch id [n]{f}	branch id [n] {f}	author name [v]

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card no [n]{f}	no of copies [n]	
date out [v]		
due date [v]		

There are seven tables in the database which you have to create in your schemas.

Note:- N=Number, D=Date, V=Varchar2, P=Primary Key, F=Foreign Key, U=Unique Key.

These are the constraints and data types which we use while creating a Data.

### Deliverables:-

- Step 1: Create a database.
- Step 2 Create all Table Structure.
- Step 3 Insert Data In The Table.
- Step 3 Solve all the Data Retrieving Problems.
- Step 4 Submit the File in NotePad.

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#### Dataset link:-

#### **Download Dataset Here**

In this link, you will get the data to import in your schemas after creating a table

After inserting the data, solve these Queries.

- 1. How many copies of the book titled "The Lost Tribe" are owned by the library branch whose name is "Sharpstown"?
- 2. How many copies of the book titled "The Lost Tribe" are owned by each library branch?
- 3. Retrieve the names of all borrowers who do not have any books checked out.
- 4. For each book that is loaned out from the "Sharpstown" branch and whose DueDate is today, retrieve the book title, the borrower's name, and the borrower's address.
- 5. For each library branch, retrieve the branch name and the total number of books loaned out from that branch.
- 6. Retrieve the names, addresses, and number of books checked out for all borrowers who have more than five books checked out.

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7. For each book authored by "Stephen King", retrieve the title and the number of copies owned by the library branch whose name is "Central".

Deadline to submit the project:- One Week.

**ALL THE BEST!!** 

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