

Tables Design

1. Books Table

Column Name	Data Type	Constraints
book_id	INT	PRIMARY KEY
title	VARCHAR(100)	
author	VARCHAR(100)	
category	VARCHAR(50)	
price	DECIMAL(8,2)	
quantity	INT	

2. Members Table

Column Name	Data Type	Constraints
member_id	INT	PRIMARY KEY
name	VARCHAR(100)	
email	VARCHAR(100)	
join_date	DATE	

3. IssueRecords Table

Column Name	Data Type	Constraints
issue_id	INT	PRIMARY KEY
book_id	INT	FOREIGN KEY → Books(book_id)
member_id	INT	FOREIGN KEY → Members(member_id)
issue_date	DATE	
return_date	DATE	

Query

Find books with title starting with 'Data'?

2. Find categories containing the word 'science'?

3. Find categories with total quantity greater than 10?

4Find members who have borrowed more than 2 books?

5. Find members who have issued books more than once in a month?

6. Get lowest quantity in stock?

7.List all members who have issued books?

8. List books never issued?

9. Procedure to add a new member?

10. Procedure to get book info By book_id?

11. Procedure to list all issued books?

12. Write a trigger to increment book quantity after a book is returned.?

13. Write a trigger that logs member information before deleting a member.?

14. Write a query to create an index on email in Members to ensure fast retrieval.?

15. Create a view to show all available books in stock.

