

## **These are the business problems that were solved.**

1. Create a New Book Record -- "978-1-60129-456-2", 'To Kill a Mockingbird', 'Classic', 6.00, 'yes', 'Harper Lee', 'J.B. Lippincott & Co.'"
2. Update an Existing Member's Address where member\_address = "125 main st" to member\_id = "C101";
3. Delete a Record from the Issued Status Table -- Objective: Delete the record with issued\_id = 'IS121' from the issued\_status table.
4. Retrieve All Books Issued by a Specific Employee -- Objective: Select all books issued by the employee with emp\_id = 'E101'.
5. List Members Who Have Issued More Than One Book -- Objective: Use GROUP BY to find members who have issued more than one book.
6. Create Summary Tables: Used CTAS to generate new tables based on query results - each book and total book\_issued\_cnt\*\*
7. Retrieve All Books in a Specific Category:
8. Find Total Rental Income by Category:
9. List Members Who Registered in the Last 180 Days:
10. List Employees with Their Branch Manager's Name and their branch details:
11. Create a Table of Books with Rental Price Above a Certain Threshold 7USD:
12. Retrieve the List of Books Not Yet Returned
13. Identify Members with Overdue Books: Write a query to identify members who have overdue books (assume a 30-day return period). Display the member's\_id, member's name, book title, issue date, and days overdue.
14. Update Book Status on Return: Write a query to update the status of books in the books table to "Yes" when they are returned (based on entries in the return\_status table).
15. Branch Performance Report: Create a query that generates a performance report for each branch, showing the number of books issued, the number of books returned, and the total revenue generated from book rentals.
16. CTAS: Create a Table of Active Members - Use the CREATE TABLE AS (CTAS) statement to create a new table active\_members containing members who have issued at least one book in the last 2 months.
17. Find Employees with the Most Book Issues Processed Write a query to find the top 3 employees who have processed the most book issues. Display the employee name, number of books processed, and their branch.
18. Stored Procedure Objective: Create a stored procedure to manage the status of books in a library system. Description: Write a stored procedure that updates the status of a book in the library based on its issuance. The procedure should function as follows: The stored procedure should take the book\_id as an input parameter. The procedure should first check if the book is available (status = 'yes'). If the book is available, it should be issued, and the status in the books table should be updated to 'no'. If the book is not available (status = 'no'), the procedure should return an error message indicating that the book is currently not available.