

LIBRARY MANAGEMENT

(AN SQL PROJECT)

*/*Display all the tables and Write the queries for the following :*/*

SELECT * from Branch;

SELECT * FROM EMPLOYEE;

SELECT * FROM BOOKS;

SELECT * FROM CUSTOMER;

SELECT * from ISSUESTATUS;

SELECT * FROM RETURNSTATUS;

1. Retrieve the book title, category, and rental price of all available books.

SELECT BOOK_TITLE ,CATEGORY,RENTAL_PRICE FROM BOOKS;

	BOOK_TITLE	CATEGORY	RENTAL_PRICE
▶	The C Programming Language	Programming	5.99
	Clean Code	Programming	7.99
	The Pragmatic Programmer	Programming	7.49
	Effective Java	Programming	6.49
	Refactoring	Software Engineering	7.99
	Design Patterns	Software Engineering	6.99
	Introduction to Algorithms	Computer Science	8.99
	Head First Design Patterns	Software Engineering	5.99
	Python for Data Analysis	Data Science	6.99
	Learning Python	Programming	6.99

2. List the employee names and their respective salaries in descending order of salary.

SELECT EMP_NAME ,SALARY FROM EMPLOYEE ORDER BY SALARY DESC ;

Result Grid			Filter Rows:
	EMP_NAME	SALARY	
▶	John Doe	75000.00	
	Laura Taylor	65000.00	
	Jane Smith	60000.00	
	Linda White	58000.00	
	Michael Brown	55000.00	
	David Wilson	50000.00	
	Robert Martin	48000.00	
	Emily Davis	45000.00	
	Sarah Johnson	40000.00	
	Kevin Moore	35000.00	

3. Retrieve the book titles and the corresponding customers who have issued those books.

```
SELECT B.BOOK_TITLE ,I.ISSUED_CUST,C.CUSTOMER_NAME
FROM BOOKS B
JOIN ISSUESTATUS I ON B.BOOK_TITLE = I.ISSUED_BOOK_NAME
JOIN CUSTOMER C ON I.ISSUED_CUST = C.CUSTOMER_ID ;
```

	BOOK_TITLE	ISSUED_CUST	CUSTOMER_NAME
▶	The C Programming Language	1	Alice Smith
	Design Patterns	2	Bob Johnson
	Introduction to Algorithms	3	Charlie Brown
	Clean Code	4	Diana Prince
	Effective Java	6	Fiona Glenanne
	The Pragmatic Programmer	7	George Lucas
	Learning Python	8	Hannah Montana
	Refactoring	9	Ian Malcolm
	Python for Data Analysis	10	Julia Roberts

4. Display the total count of books in each category.

```
SELECT COUNT(ISBN)AS COUNT_OF_BOOKS,CATEGORY FROM BOOKS
GROUP BY CATEGORY;
```

COUNT_OF_BOOKS	CATEGORY
5	Programming
3	Software Engineering
1	Computer Science
1	Data Science

5. Retrieve the employee names and their positions for the employees whose salaries are above Rs.50,000.

```
SELECT EMP_NAME ,POSITION,SALARY FROM EMPLOYEE
WHERE
SALARY > 50000.00;
```

	EMP_NAME	POSITION	SALARY
▶	John Doe	Manager	75000.00
	Jane Smith	Analyst	60000.00
	Michael Brown	Developer	55000.00
	Laura Taylor	Engineer	65000.00
	Linda White	Executive	58000.00

#6. List the customer names who registered before 2024-07-30 and have not issued any books yet.

```
SELECT C.CUSTOMER_NAME ,C.REG_DATE
FROM CUSTOMER C
JOIN ISSUESTATUS I
ON C.CUSTOMER_ID = I.ISSUED_CUST
WHERE C.REG_DATE < '2024-07-30' AND I.ISSUED_BOOK_NAME="";
```

	CUSTOMER_NAME	REG_DATE
▶	Edward Elric	2023-05-18

#7. Display the branch numbers and the total count of employees in each branch.

```
SELECT B.BRANCH_NO,COUNT(E.EMP_ID) AS TOTAL_EMPLOYEES
FROM BRANCH B
JOIN EMPLOYEE E
ON B.BRANCH_NO = E.BRANCH_NO GROUP BY BRANCH_NO;
```

	BRANCH_NO	TOTAL_EMPLOYEES
▶	1	2
	2	2
	3	2
	4	3
	5	1

#8. Display the names of customers who have issued books in the month of June 2024.

```
SELECT C.CUSTOMER_NAME ,I.ISSUE_DATE
FROM CUSTOMER C
JOIN ISSUESTATUS I
ON C.CUSTOMER_ID = I.ISSUED_CUST WHERE I.ISSUE_DATE BETWEEN
'2024-06-01'AND '2024-06-30';
```

	CUSTOMER_NAME	ISSUE_DATE
▶	Fiona Glenanne	2024-06-25

#9. Retrieve book_title from book table containing DATA SCIENCE.

```
SELECT BOOK_TITLE,CATEGORY FROM BOOKS
WHERE CATEGORY='DATA SCIENCE';
```

	BOOK_TITLE	CATEGORY
▶	Python for Data Analysis	Data Science

10.Retrieve the branch numbers along with the count of employees for branches having more than 2 employees.

```
SELECT BRANCH_NO ,COUNT(EMP_ID) AS EMPLOYEE_COUNT
FROM EMPLOYEE
GROUP BY BRANCH_NO HAVING COUNT(EMP_ID)>2;
```

	BRANCH_NO	EMPLOYEE_COUNT
▶	4	3

#11. Retrieve the names of employees who manage branches and their respective branch addresses.

```
SELECT E.EMP_NAME, B.BRANCH_ADDRESS
FROM EMPLOYEE E
JOIN BRANCH B
ON B.BRANCH_NO = E.BRANCH_NO
WHERE E.POSITION = 'MANAGER';
```

	EMP_NAME	BRANCH_ADDRESS
▶	John Doe	123 Main St, New York, NY

#12. Display the names of customers who have issued books with a rental price higher than Rs.7.

```
SELECT C.CUSTOMER_NAME, B.RENTAL_PRICE
FROM BOOKS B
JOIN ISSUESTATUS I ON B.BOOK_TITLE = I.ISSUED_BOOK_NAME
JOIN CUSTOMER C ON I.ISSUED_CUST = C.CUSTOMER_ID
WHERE B.RENTAL_PRICE > 7;
```

	CUSTOMER_NAME	RENTAL_PRICE
▶	Charlie Brown	8.99
	Diana Prince	7.99
	George Lucas	7.49
	Ian Malcolm	7.99