

Created a database named library and following TABLES in the database:

1. Branch
2. Employee
3. Books
4. Customer
5. IssueStatus
5. ReturnStatus

Attributes for the tables:

1. Branch

Branch_no - Set as PRIMARY KEY
Manager_Id
Branch_address
Contact_no

2. Employee

Emp_Id – Set as PRIMARY KEY
Emp_name
Position
Salary
Branch_no - Set as FOREIGN KEY and it refer Branch_no in Branch table

3. Books

ISBN - Set as PRIMARY KEY
Book_title
Category
Rental_Price
Status [Give yes if book available and no if book not available]
Author
Publisher

4. Customer

Customer_Id - Set as PRIMARY KEY
Customer_name
Customer_address
Reg_date

5. IssueStatus

Issue_Id - Set as PRIMARY KEY
Issued_cust – Set as FOREIGN KEY and it refer customer_id in CUSTOMER table
Issued_book_name
Issue_date
Isbn_book – Set as FOREIGN KEY and it should refer isbn in BOOKS table

6. ReturnStatus

Return_Id - Set as PRIMARY KEY
Return_cust

Return_book_name

Return_date

Isbn_book2 - Set as FOREIGN KEY and it should refer isbn in BOOKS table

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

Displaying all the tables:

```
171 -- Display all the tables |
172 • select * from branch;
173 • select * from employee;
174 • select * from books;
175 • select * from customer;
176 • select * from issuestatus;
177 • select * from returnstatus;
```

Table-Branch

	Branch_no	Manager_Id	Branch_address	Contact_no
▶	1	123	ABC	98765678
	2	124	DEF	97876544
	3	125	GHI	95674567
	4	126	JKL	94567899
	5	127	MNO	93456789
•	NULL	NULL	NULL	NULL

Table-Employee

	Emp_Id	Emp_name	Position	Salary	Branch_no
▶	100	Nikhil	Clerk	20000	1
	101	Sam	Asset Manager	35000	4
	102	Ram	Credit Analyst	40000	1
	103	Kim	Auditor	50000	1
	104	Seema	Clerk	25000	4
	105	Reenu	Manager	70000	1
	106	Kirthi	Auditor	50000	2
	107	Kripa	Auditor	50000	3
	108	Reema	Manager	70000	2
	109	Rani	Manager	70000	3
	110	Raki	Manager	70000	5
	111	Ram	Credit Analyst	40000	3
	112	Ray	Credit Analyst	40000	4
✱	NULL	NULL	NULL	NULL	NULL

Table- Books

Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content: IA							
	ISBN	Book_title	Category	Rental_Price	Status	Author	Publisher
▶	234567890	1984	Science Fiction	11	yes	George Orwell	Secker & Warburg
	345678901	Pride and Prejudice	Romance	9	yes	Jane Austen	T. Egerton, Whitehall
	456789012	The Catcher in the Rye	Fiction	10	yes	J.D. Salinger	Little, Brown and Company
	567890123	The Hobbit	Fantasy	11	yes	J.R.R. Tolkien	Allen & Unwin
	678901234	Brave New World	Science Fiction	12	yes	Aldous Huxley	Chatto & Windus
	789012345	Animal Farm	Political Satire	10	yes	George Orwell	Secker & Warburg
	890123456	The Lord of the Rings	Fantasy	15	yes	J.R.R. Tolkien	Allen & Unwin
	901234567	Harry Potter and the Sorcerer's Stone	Fantasy	13	no	J.K. Rowling	Bloomsbury
	987654321	To Kill a Mockingbird	Fiction	12	yes	Harper Lee	J. B. Lippincott & Co.
✱	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Table-Customer






Result Grid   Filter Rows: <input type="text"/> Edit:    Export/Import				
	Customer_Id	Customer_name	Customer_address	Reg_date
▶	100	Merin	230 Street U.S	2010-05-01 10:30:00
	101	Sherin	101 Street U.K	2015-04-03 11:45:00
	102	Anson	ABC lane Newsland	2014-01-02 10:30:00
	103	John Doe	123 Main St	2024-03-11 09:00:00
	104	Jane Smith	456 Elm St	2024-03-10 10:30:00
	105	Bob Johnson	789 Oak St	2024-03-09 11:45:00
	106	Alice Brown	321 Pine St	2024-03-08 12:15:00
	107	Sarah Wilson	654 Maple St	2024-03-07 13:20:00
	108	Michael Lee	987 Cedar St	2024-03-06 14:45:00
	109	Emily Garcia	741 Birch St	2024-03-05 15:10:00
	110	David Martinez	852 Walnut St	2024-03-04 16:30:00
	111	Laura Rodriguez	369 Sycamore St	2024-03-03 17:20:00
	112	Daniel Hernandez	159 Cherry St	2024-03-02 18:00:00
✱	NULL	NULL	NULL	NULL

Table - IssueStatus









Result Grid   Filter Rows: <input type="text"/> Edit:    Export/Import:   Wrap Cell Content: 					
	Issue_Id	Issued_cust	Issued_book_name	Issue_date	Isbn_book
▶	2	104	To Kill a Mockingbird	2024-03-10	987654321
	3	105	1984	2024-03-09	234567890
	4	106	Pride and Prejudice	2024-03-08	345678901
	5	107	The Catcher in the Rye	2024-03-07	456789012
	6	108	The Hobbit	2024-03-06	567890123
	7	109	Brave New World	2024-03-05	678901234
	8	110	Animal Farm	2024-03-04	789012345
	9	111	The Lord of the Rings	2024-03-03	890123456
	10	112	Harry Potter and the Sorcerer's Stone	2023-06-02	901234567
✱	NULL	NULL	NULL	NULL	NULL

Table-ReturnStatus

Result Grid					
Filter Rows:		Edit:		Export/Import:	
Return_Id	Return_cust	Return_book_name	Return_date	Isbn_book2	
2	Jane Smith	To Kill a Mockingbird	2024-03-19	987654321	
3	Bob Johnson	1984	2024-03-18	234567890	
4	Alice Brown	Pride and Prejudice	2024-03-17	345678901	
5	Sarah Wilson	The Catcher in the Rye	2024-03-16	456789012	
6	Michael Lee	The Hobbit	2024-03-15	567890123	
7	Emily Garcia	Brave New World	2024-03-14	678901234	
8	David Martinez	Animal Farm	2024-03-13	789012345	
9	Laura Rodriguez	The Lord of the Rings	2024-03-12	890123456	
10	Daniel Hernandez	Harry Potter and the Sorcerer's Stone	2023-07-11	901234567	
NULL	NULL	NULL	NULL	NULL	

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

```
178 -- 1. Retrieve the book title, category, and rental price of all available books.
179 • select book_title,category,rental_price from books;
```

Result Grid			
Filter Rows:		Export:	
book_title	category	rental_price	
1984	Science Fiction	11	
Pride and Prejudice	Romance	9	
The Catcher in the Rye	Fiction	10	
The Hobbit	Fantasy	11	
Brave New World	Science Fiction	12	
Animal Farm	Political Satire	10	
The Lord of the Rings	Fantasy	15	
Harry Potter and the Sorcerer's Stone	Fantasy	13	
To Kill a Mockingbird	Fiction	12	

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

```

181 -- 2. List the employee names and their respective salaries in descending order of salary.
182 • select emp_name,salary from employee order by salary desc;

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

emp_name	salary
Reenu	70000
Reema	70000
Rani	70000
Raki	70000
Kim	50000
Kirithi	50000
Kripa	50000
Ram	40000
Ram	40000
Ray	40000
Sam	35000
Seema	25000
Nikhil	20000

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

```

185 • select b.book_title,c.customer_name from issuestatus i
186 inner join books b on i.isbn_book=b.isbn
187 inner join customer c on c.customer_id=i.issued_cust;

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

book_title	customer_name
To Kill a Mockingbird	Jane Smith
1984	Bob Johnson
Pride and Prejudice	Alice Brown
The Catcher in the Rye	Sarah Wilson
The Hobbit	Michael Lee
Brave New World	Emily Garcia
Animal Farm	David Martinez
The Lord of the Rings	Laura Rodriguez
Harry Potter and the Sorcerer's Stone	Daniel Hernandez

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

```

190      -- 4. Display the total count of books in each category.
191 •    select category,count(*) from books group by category;

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
category	count(*)		
Science Fiction	2		
Romance	1		
Fiction	2		
Fantasy	3		
Political Satire	1		

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

```

194      -- 5. Retrieve the employee names and their positions for the employees whose salaries are above Rs.50,000.
195 •    select emp_name,position_ from employee where salary > 50000;

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
emp_name	position_		
Reenu	Manager		
Reema	Manager		
Rani	Manager		
Raki	Manager		

6. List the customer names who registered before 2022-01-01 and have not issued any books yet.

```

196      -- 6. List the customer names who registered before 2022-01-01 and have not issued any books yet.
197 •    select customer_name from customer where reg_date < '2022-01-01' and customer_id not in (select issued_cust from issuestatus);

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
customer_name			
Merin			
Sherin			
Anson			

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

```

200 -- 7. Display the branch numbers and the total count of employees in each branch.
201 • select branch_no,count(*) from employee group by branch_no;

```

	branch_no	count(*)
▶	1	4
	2	2
	3	3
	4	3
	5	1

8. Display the names of customers who have issued books in the month of June 2023.

```

202 -- 8. Display the names of customers who have issued books in the month of June 2023.
203 • select c.customer_name from customer c join issuestatus i on c.customer_id = i.issued_cust where i.issue_date like '2023-06-__';

```

	customer_name
▶	Daniel Hernandez

9. Retrieve book_title from book table containing history.

```

206 • insert into books values
207 (97812345,'The History of the World','History',10,'yes','John Smith','Random House');
208 -- 9. Retrieve book_title from book table containing history.
209 • select book_title from books where book_title like '%history%';

```

	book_title
▶	The History of the World

10.Retrieve the branch numbers along with the count of employees for branches having more than 5 employees

```

212 • insert into employee values
213 (113,'Nikhil','Auditor',30000,1),
214 (114,'Vimal','Credit Analyst',40000,1);
215 -- 10.Retrieve the branch numbers along with the count of employees for branches having more than 5 employees.
216 • select branch_no from employee group by branch_no having count(branch_no) > 5;

```

	branch_no
▶	1