Output of the code

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:

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: | 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: | 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: | Wrap Cell Co

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

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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: | Wrap Cell Content:

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:

emp_name	salary
Reenu	70000
Reema	70000
Rani	70000
Raki	70000
Kim	50000
Kirthi	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:

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;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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-__';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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%';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

branch_no
1