

Database named library and following TABLES in the database:

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

1) Branch

- Branch\_no Set as PRIMARY KEY  
Manager\_Id  
Branch\_address  
Contact\_no

	Branch_no	Manager_Id	Branch_address	Contact_no
▶	1	101	123 Elm St	555-1234
	2	102	456 Maple St	555-5678
	3	103	789 Oak St	555-9012
	4	104	321 Pine St	555-3456
	5	105	654 Birch St	555-7890
	6	106	987 Cedar St	555-2345
	7	107	741 Spruce St	555-6789
	8	108	852 Fir St	555-0123
	9	109	963 Willow St	555-4567
	10	110	159 Poplar St	555-8901
•	NULL	NULL	NULL	NULL

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

Emp_Id	Emp_name	Position	Salary	Branch_no
201	Alice Smith	Manager	60000.00	1
202	Bob Johnson	Assistant	40000.00	2
203	Carol Williams	Clerk	30000.00	3
204	David Brown	Manager	65000.00	4
205	Eve Davis	Assistant	42000.00	5
206	Frank Miller	Clerk	31000.00	6
207	Grace Wilson	Manager	62000.00	7
208	Hank Moore	Assistant	41000.00	8
209	Ivy Taylor	Clerk	32000.00	9
210	Jack Anderson	Manager	63000.00	10
NULL	NULL	NULL	NULL	NULL

### 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

ISBN	Book_title	Category	Rental_Price	Status	Author	Publisher
978-0-06-112008-4	Book Seven	Biography	13.00	yes	Author G	Publisher D
978-0-307-29136-7	Book Nine	Historical	7.00	yes	Author I	Publisher F
978-0-345-39180-3	Book Six	Fantasy	11.00	yes	Author F	Publisher C
978-0-399-16243-8	Book Ten	Horror	10.00	yes	Author J	Publisher G
978-0-452-28423-4	Book Five	Sci-Fi	9.00	no	Author E	Publisher B
978-0-7432-7356-0	Book Three	Mystery	15.00	no	Author C	Publisher Z
978-1-250-30578-9	Book Eight	Thriller	14.00	no	Author H	Publisher E
978-1-4028-9462-6	Book Four	Romance	8.00	yes	Author D	Publisher A
978-1-86197-876-9	Book Two	Non-Fiction	12.00	yes	Author B	Publisher Y
978-3-16-148410-0	Book One	Fiction	10.00	yes	Author A	Publisher X
NULL	NULL	NULL	NULL	NULL	NULL	NULL

### 4) Customer

- Customer\_Id, Set as PRIMARY KEY  
Customer\_name  
Customer\_address  
Reg\_date

Customer_Id	Customer_name	Customer_address	Reg_date
301	Michael Scott	100 Paper St	2023-01-01
302	Pam Beesly	200 Art St	2023-02-01
303	Jim Halpert	300 Sales St	2023-03-01
304	Dwight Schrute	400 Beet St	2023-04-01
305	Angela Martin	500 Cat St	2023-05-01
306	Kevin Malone	600 Accounting St	2023-06-01
307	Oscar Martinez	700 Finance St	2023-07-01
308	Ryan Howard	800 Temp St	2023-08-01
309	Kelly Kapoor	900 Customer Service St	2023-09-01
310	Stanley Hudson	1000 Sales St	2023-10-01
NULL	NULL	NULL	NULL

### 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

Issue_Id	Issued_cust	Issued_book_name	Issue_date	Isbn_book
401	301	Book One	2023-01-05	978-3-16-148410-0
402	302	Book Two	2023-02-10	978-1-86197-876-9
403	303	Book Three	2023-03-15	978-0-7432-7356-0
404	304	Book Four	2023-04-20	978-1-4028-9462-6
405	305	Book Five	2023-05-25	978-0-452-28423-4
406	306	Book Six	2023-06-30	978-0-345-39180-3
407	307	Book Seven	2023-07-05	978-0-06-112008-4
408	308	Book Eight	2023-08-10	978-1-250-30578-9
409	309	Book Nine	2023-09-15	978-0-307-29136-7
410	310	Book Ten	2023-10-20	978-0-399-16243-8
NULL	NULL	NULL	NULL	NULL

## 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

Return_Id	Return_cust	Return_book_name	Return_date	Isbn_book2
501	301	Book One	2023-01-20	978-3-16-148410-0
502	302	Book Two	2023-02-25	978-1-86197-876-9
503	303	Book Three	2023-03-30	978-0-7432-7356-0
504	304	Book Four	2023-04-30	978-1-4028-9462-6
505	305	Book Five	2023-05-30	978-0-452-28423-4
506	306	Book Six	2023-06-30	978-0-345-39180-3
507	307	Book Seven	2023-07-30	978-0-06-112008-4
508	308	Book Eight	2023-08-30	978-1-250-30578-9
509	309	Book Nine	2023-09-30	978-0-307-29136-7
510	310	Book Ten	2023-10-30	978-0-399-16243-8
NULL	NULL	NULL	NULL	NULL

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

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

Ans:

```

164 • select Issued_book_name, Book_title, Category, Rental_Price from
165 Books inner join issuestatus on Books.ISBN = issuestatus.Isbn_book;
166

```

Result Grid    Filter Rows: <input type="text"/>   Export:    Wrap Cell Content: 				
	Issued_book_name	Book_title	Category	Rental_Price
▶	Book Eight	Book Eight	Thriller	14.00
	Book Five	Book Five	Sci-Fi	9.00
	Book Four	Book Four	Romance	8.00
	Book Nine	Book Nine	Historical	7.00
	Book One	Book One	Fiction	10.00
	Book Seven	Book Seven	Biography	13.00
	Book Six	Book Six	Fantasy	11.00
	Book Ten	Book Ten	Horror	10.00
	Book Three	Book Three	Mystery	15.00
	Book Two	Book Two	Non-Fiction	12.00




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

Ans:

```

164 • select Emp_name, Salary from employee order by Salary desc;
165

```

Result Grid    Filter Rows: <input type="text"/>   Export:    Wrap Cell Content: 		
	Emp_name	Salary
▶	David Brown	65000.00
	Jack Anderson	63000.00
	Grace Wilson	62000.00
	Alice Smith	60000.00
	Eve Davis	42000.00
	Hank Moore	41000.00
	Bob Johnson	40000.00
	Ivy Taylor	32000.00
	Frank Miller	31000.00
	Carol Williams	30000.00

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

Ans:

```

163
164 • select Customer_name, Issued_book_name from issuestatus
165 inner join customer on issuestatus.Issued_cust = customer.Customer_Id;
166

```

Result Grid		
	Filter Rows:	Export: Wrap Cell Content:
	Customer_name	Issued_book_name
▶	Michael Scott	Book One
	Pam Beesly	Book Two
	Jim Halpert	Book Three
	Dwight Schrute	Book Four
	Angela Martin	Book Five
	Kevin Malone	Book Six
	Oscar Martinez	Book Seven
	Ryan Howard	Book Eight
	Kelly Kapoor	Book Nine
	Stanley Hudson	Book Ten

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

Ans:

```

167
168 • select Category, count(*) from books group by Category;
169

```

Result Grid		
	Filter Rows:	Export: Wrap Cell Content:
	Category	count(*)
▶	Biography	1
	Historical	1
	Fantasy	1
	Horror	1
	Sci-Fi	1
	Mystery	1
	Thriller	1
	Romance	1
	Non-Fiction	1
	Fiction	1

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

Ans:

```

170 • select Emp_name, Position from employee
171 where Salary > 50000.00;
172
173
174

```

Result Grid	Filter Rows:	Export:	Wrap
Emp_name	Position		
Alice Smith	Manager		
David Brown	Manager		
Grace Wilson	Manager		
Jack Anderson	Manager		

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

Ans:

```

174 • select Customer_name from customer
175 left join issuestatus on customer.Customer_Id = issuestatus.Issued_cust
176 where Reg_date < '2022-01-01' and Issue_Id is null;
177
178

```

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

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

Ans:

```

180
181 • select branch_no, count(*) as empPerbranch from employee
182 group by branch_no;
183
184
185

```

branch_no	empPerbranch
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1

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

Ans:

```

186 • select Customer_name, Issue_date from customer
187 left join issuestatus on customer.Customer_Id = issuestatus.Issued_cust
188 where Reg_date between '2023-06-01' and '2023-06-30';
189
190

```

Customer_name	Issue_date
Kevin Malone	2023-06-30

9. Retrieve book\_title from book table containing history.

Ans:

```

190 • select Book_title from books where Category = 'Historical';
191

```

Book_title
Book Nine

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



Ans:

```
193 • select branch_no, count(Emp_Id) from employee
194 group by branch_no having count(Emp_Id) > 5 ;
195
```

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

branch_no	count(Emp_Id)
-----------	---------------

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

Ans:

```
197
198 • select e.Emp_name, b.Branch_address from employee e inner join Branch b
199 on e.Branch_no = b.Branch_no;
200
201
```

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

Emp_name	Branch_address
Alice Smith	123 Elm St
Bob Johnson	456 Maple St
Carol Williams	789 Oak St
David Brown	321 Pine St
Eve Davis	654 Birch St
Frank Miller	987 Cedar St
Grace Wilson	741 Spruce St
Hank Moore	852 Fir St
Ivy Taylor	963 Willow St
Jack Anderson	159 Poplar St

12. Display the names of customers who have issued books with a rental price higher than Rs. 25.

Ans:



197

```
198 • select c.Customer_name from customer c inner join (  
199 select i.Issued_cust from issuestatus i inner join books b  
200 on i.Issued_book_name = b.Book_title  
201 where Rental_Price > 25) d on c.Customer_Id = d.Issued_cust;
```

202

203

Result Grid



Filter Rows:

Export:



Wrap Cell Content:



Customer_name
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