

# MYSQL Comprehensive Assessment

## **Topic : Library Management System**

You are going to build a project based on the Library Management System. It keeps track of all information about books in the library, their cost, status and total number of books available in the library.

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

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

1. Retrieve the book title, category, and rental price of all available books.
2. List the employee names and their respective salaries in descending order of salary.
3. Retrieve the book titles and the corresponding customers who have issued those books.
4. Display the total count of books in each category.
5. Retrieve the employee names and their positions for the employees whose salaries are above Rs.50,000.
6. List the customer names who registered before 2022-01-01 and have not issued any books yet.
7. Display the branch numbers and the total count of employees in each branch.
8. Display the names of customers who have issued books in the month of June 2023.
9. Retrieve book\_title from a book table containing history.
10. Retrieve the branch numbers along with the count of employees for branches having more than 5 employees
11. Retrieve the names of employees who manage branches and their respective branch addresses.
12. Display the names of customers who have issued books with a rental price higher than Rs. 25.

Ans:

```

40     Reg_date DATE
41   );
42
43  # Create IssueStatus table
44  CREATE TABLE IssueStatus (
45    Issue_Id INT PRIMARY KEY,
46    Issued_cust INT,
47    Issued_book_name VARCHAR(255),
48    Issue_date DATE,
49    Isbn_book VARCHAR(20),
50    FOREIGN KEY (Issued_cust) REFERENCES Customer(Customer_Id),
51    FOREIGN KEY (Isbn_book) REFERENCES Books(ISBN)
52  );
53
54  # Create ReturnStatus table
55  CREATE TABLE ReturnStatus (
56    Return_Id INT PRIMARY KEY,
57    Return_cust INT,
58    Return_book_name VARCHAR(255),
59    Return_date DATE,
60    Isbn_book2 VARCHAR(20),
61    FOREIGN KEY (Return_cust) REFERENCES Customer(Customer_Id),
62    FOREIGN KEY (Isbn_book2) REFERENCES Books(ISBN)
63  );
64
65  SHOW TABLES;

```

Result Grid | Filter Rows:  Search Export:

Tables_in_libr...	
	Books
	Branch
	Customer
	Employee
	IssueStatus
	ReturnStatus

Result 1

Action Output

Time	Action	Response	Duration / Fetch Time
12 22:38:13	DESCRIBE Library	Error Code: 1146. Table 'library.library' doesn't exist	0.00083 sec
13 22:39:06	SELECT Library LIMIT 0, 1000	Error Code: 1054. Unknown column 'Library' in 'field list'	0.00034 sec
14 22:40:03	SHOW TABLES	6 row(s) returned	0.0034 sec / 0.0000...

Read Only

## 1. Branch Table

```

129 (9004, 3004, 'Aarachar', '2024-02-15', '978-81-7958-046-7'),
130 (9005, 3005, 'Oru Sankerthanam Pole', '2024-02-28', '978-81-264-1527-7'),
131 (9006, 3006, 'Yakshi', '2024-04-05', '978-81-264-2367-8'),
132 (9007, 3007, 'Manju', '2024-03-01', '978-81-264-2476-7'),
133 (9008, 3008, 'Balayakalasakhi', '2024-01-25', '978-81-264-2137-7'),
134 (9009, 3009, 'Pathummayude Aadu', '2024-05-05', '978-81-264-2086-7'),
135 (9010, 3100, 'Chemmen', '2024-03-20', '978-81-264-2626-7');
136
137  INSERT INTO ReturnStatus (Return_Id, Return_cust, Return_book_name, Return_date, Isbn_book2) VALUES
138 (8001, 3001, 'Raniamoortham', '2024-02-20', '978-81-264-2776-2'),
139 (8002, 3002, 'Khasakkinte Itthasam', '2024-02-25', '978-81-7201-828-1'),
140 (8003, 3003, 'Mayazhippupuzhayude Therangalil', '2024-03-15', '978-81-264-0119-9'),
141 (8004, 3004, 'Aarachar', '2024-03-10', '978-81-7958-046-7'),
142 (8005, 3005, 'Oru Sankerthanam Pole', '2024-03-15', '978-81-264-1527-7'),
143 (8006, 3006, 'Yakshi', '2024-04-10', '978-81-264-2367-8'),
144 (8007, 3007, 'Manju', '2024-03-10', '978-81-264-2476-7'),
145 (8008, 3008, 'Balayakalasakhi', '2024-02-28', '978-81-264-2137-7'),
146 (8009, 3009, 'Pathummayude Aadu', '2024-05-10', '978-81-264-2086-7'),
147 (8010, 3100, 'Chemmen', '2024-03-30', '978-81-264-2626-7);
148
149  SELECT * FROM Branch;
150  SELECT * FROM Employee;
151  SELECT * FROM Books;
152  SELECT * FROM Customer;
153  SELECT * FROM IssueStatus;
154  SELECT * FROM ReturnStatus;

```

Result Grid | Filter Rows:  Search Edit: Export/Import:

Branch_no	Manager_Id	Branch_address	Contact_no
1	1011	Ernakulam	9895999901
2	1012	Tiruvananthapuram	9895999902
3	1013	Thrissur	9895999903
4	1014	Palakkad	9895999904
5	1015	Kozhikode	9895999905
6	1016	Kollam	9895999906
7	1017	Alappuzha	9895999907
8	1018	Kottayam	9895999908
9	1019	Pathanamthitta	9895999909
10	1110	Idukki	9895999911
HULL	HULL	HULL	HULL

Branch 10 Employee 11 Books 12 Customer 13 IssueStatus 14 ReturnStatus 15

Action Output

Time	Action	Response	Duration / Fetch Time
34 22:51:24	SELECT * FROM Customer LIMIT 0, 1000	10 row(s) returned	0.00025 sec / 0.0000...
35 22:51:24	SELECT * FROM IssueStatus LIMIT 0, 1000	10 row(s) returned	0.00024 sec / 0.0000...
36 22:51:24	SELECT * FROM ReturnStatus LIMIT 0, 1000	10 row(s) returned	0.00022 sec / 0.0000...

## 2. Employee Table

Schemas

```

140 ('8003, 3003, 'Mayayazhipuzhayude Theerangalil', '2024-03-15', '978-81-264-0119-9'),
141 ('8004, 3004, 'Aarachar', '2024-03-10', '978-81-7958-046-7'),
142 ('8005, 3005, 'Oru Sankeerthanam Pole', '2024-03-15', '978-81-264-1527-7'),
143 ('8006, 3006, 'Yakshi', '2024-04-10', '978-81-264-2367-8'),
144 ('8007, 3007, 'Manju', '2024-03-10', '978-81-264-2476-7'),
145 ('8008, 3008, 'Buyalakalasakhi', '2024-02-28', '978-81-264-2137-7'),
146 ('8009, 3009, 'Pathummayude Aadu', '2024-05-10', '978-81-264-2006-7'),
147 ('8010, 3100, 'Chemeen', '2024-03-30', '978-81-264-2626-7');

148 • SELECT * FROM Branch;
149 • SELECT * FROM Employee;
150 • SELECT * FROM Books;
151 • SELECT * FROM Customer;
152 • SELECT * FROM IssueStatus;
153 • SELECT * FROM ReturnStatus;
154 • SELECT * FROM BookStatus;

155
156
157
158
159

```

Table: ReturnStatus

Object Info Session

Columns:

Return_Id	int PK			
Return_cust	int			
Return_book_name	varchar(255)			
Return_date	date			
isbn_book2	varchar(20)			
1011	Joseph Philip	Manager	50000.00	1
1012	John Chandy	Manager	60000.00	2
1013	Milen Michael	Manager	50000.00	3
1014	Jolly John	Manager	53000.00	4
1015	Wilson Joseph	Manager	52000.00	5
1016	Fabi Francis	Manager	50000.00	6
1017	Jisna John	Manager	50000.00	7
1018	Fency Francis	Manager	50000.00	8
1019	Iera Francis	Manager	50000.00	9
1020	Nithin Francis	Manager	50000.00	9
2441	Dinesh Jacob	Librarian	36000.00	1
2442	Jessica John	Librarian	33000.00	2
2443	Christy Thomas	Librarian	31000.00	3
2444	Lissy Jackson	Librarian	37000.00	4
2445	Tony Thomas	Librarian	37000.00	5
2446	Jimmy Peter	Librarian	37000.00	6
2447	Sreenath Sre.	Librarian	37000.00	7
2448	Subin Suresh	Librarian	37000.00	8
2449	Manu Manoj	Librarian	37000.00	9
2500	Venu Jose	Librarian	37000.00	10

Result Grid Filter Rows: Search Edit: Export/Import:

Action Output

Time	Action	Response	Duration / Fetch Time
34	22:51:24 SELECT * FROM Customer LIMIT 0, 1000	10 row(s) returned	0.00025 sec / 0.0000...
35	22:51:24 SELECT * FROM IssueStatus LIMIT 0, 1000	10 row(s) returned	0.00024 sec / 0.0000...
36	22:51:24 SELECT * FROM ReturnStatus LIMIT 0, 1000	10 row(s) returned	0.00022 sec / 0.0000...

## 3. Books

Schemas

```

140 ('8003, 3003, 'Mayayazhipuzhayude Theerangalil', '2024-03-15', '978-81-264-0119-9'),
141 ('8004, 3004, 'Aarachar', '2024-03-10', '978-81-7958-046-7'),
142 ('8005, 3005, 'Oru Sankeerthanam Pole', '2024-03-15', '978-81-264-1527-7'),
143 ('8006, 3006, 'Yakshi', '2024-04-10', '978-81-264-2367-8'),
144 ('8007, 3007, 'Manju', '2024-03-10', '978-81-264-2476-7'),
145 ('8008, 3008, 'Buyalakalasakhi', '2024-02-28', '978-81-264-2137-7'),
146 ('8009, 3009, 'Pathummayude Aadu', '2024-05-10', '978-81-264-2006-7'),
147 ('8010, 3100, 'Chemeen', '2024-03-30', '978-81-264-2626-7');

148 • SELECT * FROM Branch;
149 • SELECT * FROM Employee;
150 • SELECT * FROM Books;
151 • SELECT * FROM Customer;
152 • SELECT * FROM IssueStatus;
153 • SELECT * FROM ReturnStatus;
154 • SELECT * FROM BookStatus;

155
156
157
158
159

```

Table: ReturnStatus

Object Info Session

Columns:

Return_Id	int PK					
Return_cust	int					
Return_book_name	varchar(255)					
Return_date	date					
isbn_book2	varchar(20)					
978-81-264-0119-9	Mayayazhipuzhayude Theerangalil	Historical Fiction	20.00	no	M. Mukundan	DC Books
978-81-264-1527-7	Oru Sankeerthanam Pole	Fiction	18.00	yes	Perumbavaram Sreedharan	DC Books
978-81-264-2006-7	Pathummayude Aadu	Autobiographical Fiction	18.00	yes	Valkom Muhammad Basheer	DC Books
978-81-264-2137-7	Buyalakalasakhi	Romance	18.00	yes	Valkom Muhammad Basheer	DC Books
978-81-264-2367-8	Yakshi	Psychological Fiction	18.00	yes	Malayattor Ramakrishnan	DC Books
978-81-264-2476-7	Manju	Political Fiction	15.00	yes	M. T. Vasudevan Nair	DC Books
978-81-264-2626-7	Chemeen	Fiction	19.00	no	Thakazhi Sivasankara Pillai	DC Books
978-81-264-2776-8	Randamozham	Fiction	25.00	yes	M. T. Vasudevan Nair	DC Books
978-81-7201-828-1	Khasakkinte Ithhasam	Fiction	22.00	yes	O. V. Vijayan	DC Books
978-81-7958-046-7	Aarachar	Historical Fiction	30.00	yes	K. R. Meera	DC Books

Result Grid Filter Rows: Search Edit: Export/Import:

Action Output

Time	Action	Response	Duration / Fetch Time
34	22:51:24 SELECT * FROM Customer LIMIT 0, 1000	10 row(s) returned	0.00025 sec / 0.0000...
35	22:51:24 SELECT * FROM IssueStatus LIMIT 0, 1000	10 row(s) returned	0.00024 sec / 0.0000...
36	22:51:24 SELECT * FROM ReturnStatus LIMIT 0, 1000	10 row(s) returned	0.00022 sec / 0.0000...

## 4. Customer

SCHEMAS

```

140 (8003, 3003, 'Mayyazhippuhayude Theerangallil', '2024-03-15', '978-81-264-0119-9'),
141 (8004, 3004, 'Aarachar', '2024-03-10', '978-81-7958-046-7'),
142 (8005, 3005, 'Oru Sankerthanam Pole', '2024-03-15', '978-81-264-1527-7'),
143 (8006, 3006, 'Yakshi', '2024-04-10', '978-81-264-2367-8'),
144 (8007, 3007, 'Manju', '2024-03-10', '978-81-264-2476-7'),
145 (8008, 3008, 'Balyakalasakhi', '2024-02-28', '978-81-264-2137-7'),
146 (8009, 3009, 'Pathummayude Aadu', '2024-05-10', '978-81-264-2006-7'),
147 (8010, 3100, 'Chemmeen', '2024-03-30', '978-81-264-2626-7');
148
149 • SELECT * FROM Branch;
150 • SELECT * FROM Employee;
151 • SELECT * FROM Books;
152 • SELECT * FROM Customer;
153 • SELECT * FROM IssueStatus;
154 • SELECT * FROM ReturnStatus;
155
156
157
158
159

```

Object Info Session

Table: ReturnStatus

Columns:

Return_Id	int PK
Return_cust	int
Return_book_name	varchar(255)
Return_date	date
isbn_book2	varchar(20)

Result Grid Filter Rows: Search Edit: Export/Import:

Customer\_Id Customer\_name Customer\_address Reg\_date

3001	Rani Jacob	Aluva Ekm	2020-01-15
3002	Ani Anto	Paravur Ekm	2023-11-20
3003	Varun Joy	Paravur Ekm	2024-03-05
3004	Dany Wilson	Edappally Ekm	2018-02-10
3005	Thenu Thambi	Aluva Ekm	2023-12-30
3006	Clin Johnson	Mala Thr	2024-04-01
3007	Hilton Johnson	Mala Thr	2024-01-20
3008	Vipin Jacob	Cherthala Alp	2023-10-25
3009	Jackson Jose	Paravur Ekm	2022-05-01
3100	Seli SEBU	Pravar Ekm	2022-03-15
HULL	HULL	HULL	HULL

Action Output

Time	Action	Response	Duration / Fetch Time
34 22:51:24	SELECT * FROM Customer LIMIT 0, 1000	10 row(s) returned	0.00025 sec / 0.0000...
35 22:51:24	SELECT * FROM IssueStatus LIMIT 0, 1000	10 row(s) returned	0.00024 sec / 0.0000...
36 22:51:24	SELECT * FROM ReturnStatus LIMIT 0, 1000	10 row(s) returned	0.00022 sec / 0.0000...

## 5. IssueStatus

SCHEMAS

```

140 (8003, 3003, 'Mayyazhippuhayude Theerangallil', '2024-03-15', '978-81-264-0119-9'),
141 (8004, 3004, 'Aarachar', '2024-03-10', '978-81-7958-046-7'),
142 (8005, 3005, 'Oru Sankerthanam Pole', '2024-03-15', '978-81-264-1527-7'),
143 (8006, 3006, 'Yakshi', '2024-04-10', '978-81-264-2367-8'),
144 (8007, 3007, 'Manju', '2024-03-10', '978-81-264-2476-7'),
145 (8008, 3008, 'Balyakalasakhi', '2024-02-28', '978-81-264-2137-7'),
146 (8009, 3009, 'Pathummayude Aadu', '2024-05-10', '978-81-264-2006-7'),
147 (8010, 3100, 'Chemmeen', '2024-03-30', '978-81-264-2626-7');
148
149 • SELECT * FROM Branch;
150 • SELECT * FROM Employee;
151 • SELECT * FROM Books;
152 • SELECT * FROM Customer;
153 • SELECT * FROM IssueStatus;
154 • SELECT * FROM ReturnStatus;
155
156
157
158
159

```

Object Info Session

Table: ReturnStatus

Columns:

Return_Id	int PK
Return_cust	int
Return_book_name	varchar(255)
Return_date	date
isbn_book2	varchar(20)

Result Grid Filter Rows: Search Edit: Export/Import:

Issue\_Id Issued\_cust Issued\_book\_name Issue\_date ISBN\_book

9001	3001	Randamoozham	2024-02-01	978-81-264-2776-2
9002	3002	Khasakkinte Ithasam	2024-01-20	978-81-7201-828-1
9003	3003	Mayyazhippuhayude Theerangallil	2024-03-10	978-81-264-2119-9
9004	3004	Aarachar	2024-02-15	978-81-7958-046-7
9005	3005	Oru Sankerthanam Pole	2024-02-28	978-81-264-1527-7
9006	3006	Yakshi	2024-04-05	978-81-264-2367-8
9007	3007	Manju	2024-03-01	978-81-264-2476-7
9008	3008	Balyakalasakhi	2024-01-25	978-81-264-2137-7
9009	3009	Pathummayude Aadu	2024-05-05	978-81-264-2006-7
9010	3100	Chemmeen	2024-03-20	978-81-264-2626-7
HULL	HULL	HULL	HULL	HULL

Action Output

Time	Action	Response	Duration / Fetch Time
34 22:51:24	SELECT * FROM Customer LIMIT 0, 1000	10 row(s) returned	0.00025 sec / 0.0000...
35 22:51:24	SELECT * FROM IssueStatus LIMIT 0, 1000	10 row(s) returned	0.00024 sec / 0.0000...
36 22:51:24	SELECT * FROM ReturnStatus LIMIT 0, 1000	10 row(s) returned	0.00022 sec / 0.0000...

## 6. ReturnStatus

SCHEMAS

```

140 (8003, 3003, 'Mayayazhippuzheyude Theerangallil', '2024-03-15', '978-81-264-0119-9'),
141 (8004, 3004, 'Aarachar', '2024-03-10', '978-81-7958-046-7'),
142 (8005, 3005, 'Oru Sankerthanam Pole', '2024-03-15', '978-81-264-1527-7'),
143 (8006, 3006, 'Yakshi', '2024-04-10', '978-81-264-2367-8'),
144 (8007, 3007, 'Manju', '2024-03-10', '978-81-264-2476-7'),
145 (8008, 3008, 'Balyakalasakhi', '2024-02-28', '978-81-264-2137-7'),
146 (8009, 3009, 'Pathummayude Aadu', '2024-05-10', '978-81-264-2086-7'),
147 (8010, 3100, 'Chemmeen', '2024-03-30', '978-81-264-2626-7');

148 • SELECT * FROM Branch;
149 • SELECT * FROM Employee;
150 • SELECT * FROM Books;
151 • SELECT * FROM Customer;
152 • SELECT * FROM IssueStatus;
153 • SELECT * FROM ReturnStatus;
154 • SELECT * FROM ReturnStatus;

155
156
157
158
159

```

Object Info Session

Table: ReturnStatus

Columns:

Return_Id	int PK			
Return_cust	int			
Return_book_name	varchar(255)			
Return_date	date			
isbn_book2	varchar(20)			
8001	3001	Randamoozham	2024-02-20	978-81-264-2776-2
8002	3002	Khasakkinte Ilhasam	2024-03-15	978-81-7201-828-1
8003	3003	Mayayazhippuzheyude Theerangallil	2024-03-15	978-81-264-0119-9
8004	3004	Aarachar	2024-03-10	978-81-7958-046-7
8005	3005	Oru Sankerthanam Pole	2024-03-15	978-81-264-1527-7
8006	3006	Yakshi	2024-04-10	978-81-264-2367-8
8007	3007	Manju	2024-03-10	978-81-264-2476-7
8008	3008	Balyakalasakhi	2024-02-28	978-81-264-2137-7
8009	3009	Pathummayude Aadu	2024-05-10	978-81-264-2006-7
8010	3100	Chemmeen	2024-03-30	978-81-264-2626-7

Result Grid Filter Rows: Search Edit: Export/Import:

Branch 10 Employee 11 Books 12 Customer 13 IssueStatus 14 ReturnStatus 15

Action Output

Time	Action	Response	Duration / Fetch Time
34 22:51:24	SELECT * FROM Customer LIMIT 0, 1000	10 row(s) returned	0.00025 sec / 0.0000...
35 22:51:24	SELECT * FROM IssueStatus LIMIT 0, 1000	10 row(s) returned	0.00024 sec / 0.0000...
36 22:51:24	SELECT * FROM ReturnStatus LIMIT 0, 1000	10 row(s) returned	0.00022 sec / 0.0000...

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

SCHEMAS

```

149 • SELECT * FROM Branch;
150 • SELECT * FROM Employee;
151 • SELECT * FROM Books;
152 • SELECT * FROM Customer;
153 • SELECT * FROM IssueStatus;
154 • SELECT * FROM ReturnStatus;

155
156 • SELECT Book_title, Category, Rental_Price
  FROM Books
 WHERE Status = 'yes';
157
158
159
160
161
162
163
164
165
166
167
168

```

Object Info Session

Table: ReturnStatus

Columns:

Return_Id	int PK	
Return_cust	int	
Return_book_name	varchar(255)	
Return_date	date	
isbn_book2	varchar(20)	
Oru Sankerthanam Pole	Fiction	18.00
Pathummayude Aadu	Autobiographical Fiction	17.00
Balyakalasakhi	Romance	18.00
Yakshi	Psychological Fiction	18.00
Manju	Fiction	15.00
Randamoozham	Fiction	25.00
Khasakkinte Ilhasam	Fiction	22.00
Aarachar	Historical Fiction	30.00

Result Grid Filter Rows: Search Export:

Books 16

Action Output

Time	Action	Response	Duration / Fetch Time
35 22:51:24	SELECT * FROM IssueStatus LIMIT 0, 1000	10 row(s) returned	0.00024 sec / 0.0000...
36 22:51:24	SELECT * FROM ReturnStatus LIMIT 0, 1000	10 row(s) returned	0.00022 sec / 0.0000...
37 23:03:14	SELECT Book_title, Category, Rental_Price FROM Books WHERE Status = 'yes' LIMIT 0, 1000	8 row(s) returned	0.042 sec / 0.00082...

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

```

154 • SELECT * FROM ReturnStatus;
155
156 • SELECT Book_title, Category, Rental_Price
FROM Books
WHERE Status = 'yes';
157
158
159
160 • SELECT Emp_name, Salary
FROM Employee
161
162 ORDER BY Salary DESC;
163
164
165
166
167
168
169
170
171
172
173
    
```

**Table: ReturnStatus**

**Columns:**

Return_Id	int PK
Return_cust	int
Return_book_name	varchar(255)
Return_date	date
isbn_book2	varchar(20)
John Chandy	60000.00
Jolly John	53000.00
Wilson Joseph	52000.00
Joseph Philip	50000.00
Milen Michael	50000.00
Fabi Francis	50000.00
Jiana John	50000.00
Fency Francis	50000.00
Tera Francis	50000.00
Nithin Francis	50000.00
Lisy Jackson	37000.00
Tomy Thomas	37000.00
Jomy Peter	37000.00
Sreenath Sri...	37000.00
Subin Sureesh	37000.00
Manu Mand...	37000.00
Venu Jose	37000.00
Daniel Jacob	36000.00
Jessica John	36000.00
Christy Thomas	31000.00

Employee 17

Action Output

Time	Action	Response	Duration / Fetch Time
36 22:51:24	SELECT * FROM ReturnStatus LIMIT 0, 1000	10 row(s) returned	0.00022 sec / 0.0000...
37 23:03:14	SELECT Book_title, Category, Rental_Price FROM Books WHERE Status = 'yes' LIMIT 0, 1000	8 row(s) returned	0.042 sec / 0.00082...
38 23:06:13	SELECT Emp_name, Salary FROM Employee ORDER BY Salary DESC LIMIT 0, 1000	20 row(s) returned	0.0019 sec / 0.00001...

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

```

155
156 • SELECT Book_title, Category, Rental_Price
FROM Books
WHERE Status = 'yes';
157
158
159
160 • SELECT Emp_name, Salary
FROM Employee
161
162 ORDER BY Salary DESC;
163
164 • SELECT Books.Book_title, Customer.Customer_name
FROM IssueStatus
165 JOIN Books ON IssueStatus.isbn_book = Books.ISBN
166 JOIN Customer ON IssueStatus.Issued_cust = Customer.Customer_Id;
167
168
169
170
171
172
173
174
    
```

**Table: ReturnStatus**

**Columns:**

Return_Id	int PK
Return_cust	int
Return_book_name	varchar(255)
Return_date	date
isbn_book2	varchar(20)
Randamozham	Rani Jacob
Khasakkinte Ithasam	Anil Anto
Mayazhippuzhyude Theerangalli	Varun Joy
Aarachar	Dany Wilson
Oru Sankeerthanam Pole	Thanu Thambi
Yakshi	Clint Johnson
Manju	Hilton Johnson
Balykalasakhi	Vipin Jacob
Pathummayadu Aadu	Jackson Jose
Chemmen	Sebi seBU

Result 18

Action Output

Time	Action	Response	Duration / Fetch Time
37 23:03:14	SELECT Book_title, Category, Rental_Price FROM Books WHERE Status = 'yes' LIMIT 0, 1000	8 row(s) returned	0.042 sec / 0.00082...
38 23:06:13	SELECT Emp_name, Salary FROM Employee ORDER BY Salary DESC LIMIT 0, 1000	20 row(s) returned	0.0019 sec / 0.00001...
39 23:08:43	SELECT Books.Book_title, Customer.Customer_name FROM IssueStatus JOIN Books ON IssueStatus.isbn_book = Books.ISBN JOIN Cu...	10 row(s) returned	0.0018 sec / 0.00000...

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

SCHEMAS

```

165 FROM IssueStatus
166 JOIN Books ON IssueStatus.Issn_book = Books.ISBN
167 JOIN Customer ON IssueStatus.Issued_cust = Customer.Customer_Id;
168
169 • SELECT Category, COUNT(*) AS Total_Books
170 FROM Books
171 GROUP BY Category;
172
173
174
175
176
177
178
179
180
181
182
183
184

```

Table: ReturnStatus

Columns:

Return_Id	int PK
Return_cust	int
Return_book_name	varchar(255)
Return_date	date
Isbn_book2	varchar(20)

Result Grid

Category	Total_Books
Historical Fiction	2
Fiction	5
Autobiographical Fiction	1
Romance	1
Psychological Fiction	1

Action Output

Time	Action	Response	Duration / Fetch Time
38 23:06:13	SELECT Emp_name, Salary FROM Employee ORDER BY Salary DESC LIMIT 0, 1000	20 row(s) returned	0.0019 sec / 0.00001...
39 23:08:43	SELECT Books.Book_title, Customer.Customer_name FROM IssueStatus JOIN Books ON IssueStatus.Issn_book = Books.ISBN JOIN Cu...	10 row(s) returned	0.0018 sec / 0.00000...
40 23:11:49	SELECT Category, COUNT(*) AS Total_Books FROM Books GROUP BY Category LIMIT 0, 1000	5 row(s) returned	0.0029 sec / 0.00000...

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

SCHEMAS

```

162 ORDER BY Salary DESC;
163
164 • SELECT Books.Book_title, Customer.Customer_name
165 FROM IssueStatus
166 JOIN Books ON IssueStatus.Issn_book = Books.ISBN
167 JOIN Customer ON IssueStatus.Issued_cust = Customer.Customer_Id;
168
169 • SELECT Category, COUNT(*) AS Total_Books
170 FROM Books
171 GROUP BY Category;
172
173 • SELECT Emp_name, Position
174 FROM Employee
175 WHERE Salary > 50000;
176
177
178
179
180
181

```

Table: ReturnStatus

Columns:

Return_Id	int PK
Return_cust	int
Return_book_name	varchar(255)
Return_date	date
Isbn_book2	varchar(20)

Result Grid

Emp_name	Position
John Chandy	Manager
Jolly John	Manager
Wilson Joseph	Manager

Action Output

Time	Action	Response	Duration / Fetch Time
39 23:08:43	SELECT Books.Book_title, Customer.Customer_name FROM IssueStatus JOIN Books ON IssueStatus.Issn_book = Books.ISBN JOIN Cu...	10 row(s) returned	0.0018 sec / 0.00000...
40 23:11:49	SELECT Category, COUNT(*) AS Total_Books FROM Books GROUP BY Category LIMIT 0, 1000	5 row(s) returned	0.0029 sec / 0.00000...
41 23:13:50	SELECT Emp_name, Position FROM Employee WHERE Salary > 50000 LIMIT 0, 1000	3 row(s) returned	0.0022 sec / 0.00000...

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

The screenshot shows the MySQL Workbench interface with the following details:

- Schema:** global\_store\_db
- Table:** returnStatus
- Query:**

```

176   SELECT Customer.Customer_name
177   FROM Customer
178   LEFT JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust
179   WHERE IssueStatus.Issued_cust IS NULL AND Customer.Reg_date < '2022-01-01';
180
181   INSERT INTO Customer (Customer_Id, Customer_name, Customer_address, Reg_date) VALUES
182     (3012, 'Vinil Paul', 'Aluva Ekm', '2018-01-15');
183
184   SELECT Customer.Customer_name
185   FROM Customer
186   LEFT JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust
187   WHERE IssueStatus.Issued_cust IS NULL AND Customer.Reg_date < '2022-01-01';

```
- Result Grid:**

Customer_name
Vinil Paul
- Action Output:**

Time	Action	Response	Duration / Fetch Time
42 23:18:23	SELECT Customer.Customer_name FROM Customer LEFT JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust WHERE IssueStatus.Issued_cust IS NULL AND Customer.Reg_date < '2022-01-01';	0 row(s) returned	0.0037 sec / 0.00000...
43 23:22:03	INSERT INTO Customer (Customer_Id, Customer_name, Customer_address, Reg_date) VALUES (3012, 'Vinil Paul', 'Aluva Ekm', '2018-01-15');	1 row(s) affected	0.011 sec
44 23:22:46	SELECT Customer.Customer_name FROM Customer LEFT JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust WHERE IssueStatus.Issued_cust IS NULL AND Customer.Reg_date < '2022-01-01';	1 row(s) returned	0.00095 sec / 0.000...

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

The screenshot shows the MySQL Workbench interface with the following details:

- Schema:** global\_store\_db
- Table:** returnStatus
- Query:**

```

185   SELECT Customer.Customer_name
186   FROM Customer
187   LEFT JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust
188   WHERE IssueStatus.Issued_cust IS NULL AND Customer.Reg_date < '2022-01-01';
189
190   SELECT Branch_no, COUNT(*) AS Total_Employees
191   FROM Employee
192   GROUP BY Branch_no;
193
194   INSERT INTO IssueStatus (Issue_Id, Issued_cust, Issued_book_name, Issue_date, Isbn_book)
195   VALUES (8001, 3012, 'Randamozham', '2023-06-05', '978-81-264-2776-2');
196
197   SELECT DISTINCT Customer.Customer_name
198   FROM Customer
199   JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust
200   WHERE IssueStatus.Issue_date >= '2023-06-01' AND IssueStatus.Issue_date < '2023-07-01';
201
202   INSERT INTO Books (ISBN, Book_Title, Category, Rental_Price, Status, Author, Publisher)
203   VALUES ('978-1-1234-5678-9', 'Malayalam History Book Title', 'History', 20.00, 'yes', 'Author Name', 'Publisher Name');

```
- Result Grid:**

Branch_no	Total_Employees
1	2
2	5
3	2
4	2
5	2
6	2
7	2
8	2
9	6
10	1
- Action Output:**

Time	Action	Response	Duration / Fetch Time
55 23:54:46	INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES (2424, 'Femin George', 'Jr. Librarian', 20000.00, 09)	1 row(s) affected	0.0019 sec
56 23:54:58	SELECT Branch_no, COUNT(*) AS Total_Employees FROM Employees GROUP BY Branch_no HAVING COUNT(*) > 5 LIMIT 0, 1000	1 row(s) returned	0.00077 sec / 0.0000...
57 23:56:37	SELECT Branch_no, COUNT(*) AS Total_Employees FROM Employee GROUP BY Branch_no LIMIT 0, 1000	10 row(s) returned	0.0013 sec / 0.00000...

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

SCHEMAS

```

182 • INSERT INTO Customer (Customer_Id, Customer_name, Customer_address, Reg_date) VALUES
183     (3012, 'Vinil Paul', 'Alva Ekm', '2018-01-15');
184
185 • SELECT Customer.Customer_name
186     FROM Customer
187     LEFT JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust
188     WHERE IssueStatus.Issued_cust IS NULL AND Customer.Reg_date < '2022-01-01';
189
190 • SELECT Branch_no, COUNT(*) AS Total_Employees
191     FROM Employee
192     GROUP BY Branch_no;
193
194 • INSERT INTO IssueStatus (Issue_Id, Issued_cust, Issued_book_name, Issue_date, ISBN_book)
195     VALUES (8001, 3012, 'Randamozham', '2023-06-05', '978-81-264-2776-2');
196
197 • SELECT DISTINCT Customer.Customer_name
198     FROM Customer
199     JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust
200     WHERE IssueStatus.Issue_date >= '2023-06-01' AND IssueStatus.Issue_date < '2023-07-01';
201

```

Table: ReturnStatus

Columns:

Return_Id	int PK
Return_cust	int
Return_book_name	varchar(255)
Return_date	date
isbn_book2	varchar(20)

Object Info Session

Result Grid | Filter Rows: Search Export:

Customer\_name

Vinil Paul
------------

Result 25 | Read Only

Action Output

Time	Action	Response	Duration / Fetch Time
46	23:28:52	SELECT DISTINCT Customer.Customer_name FROM Customer JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust... 0 row(s) returned	0.0022 sec / 0.0000...
47	23:35:05	INSERT INTO IssueStatus (Issue_Id, Issued_cust, Issued_book_name, Issue_date, ISBN_book) VALUES (8001, 3012, 'Randamozham',... 1 row(s) affected	0.0031 sec
48	23:35:19	SELECT DISTINCT Customer.Customer_name FROM Customer JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust... 1 row(s) returned	0.00094 sec / 0.0000...

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

SCHEMAS

```

204
205 • INSERT INTO Books (ISBN, Book_title, Category, Rental_Price, Status, Author, Publisher)
206     VALUES ('978-1-1234-5678-9', 'Malayaliyude Ormaka!', 'History', 20.00, 'yes', 'Jacob', 'DC Books');
207
208 • SELECT Book_title
209     FROM Books
210     WHERE Category = 'History';
211
212
213
214
215
216
217
218
219
220
221
222
223

```

Table: ReturnStatus

Columns:

Return_Id	int PK
Return_cust	int
Return_book_name	varchar(255)
Return_date	date
isbn_book2	varchar(20)

Object Info Session

Result Grid | Filter Rows: Search Export:

Book\_title

Malayaliyude Ormaka!
----------------------

Books 27 | Read Only

Action Output

Time	Action	Response	Duration / Fetch Time
49	23:37:38	SELECT Book_title FROM Books WHERE Category = 'History' LIMIT 0, 1000	0 row(s) returned
50	23:43:16	INSERT INTO Books (ISBN, Book_title, Category, Rental_Price, Status, Author, Publisher) VALUES ('978-1-1234-5678-9', 'Malayaliyud...', 1 row(s) affected	0.012 sec
51	23:43:24	SELECT Book_title FROM Books WHERE Category = 'History' LIMIT 0, 1000	1 row(s) returned

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

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** global\_store\_db
- Table:** ReturnStatus
- Query:**

```

212 INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES
213 (2422, 'Ancy Jacob', 'Admin', 35000.00, 09);
214 (2423, 'Mani Paul', 'Jr. Librarian', 28000.00, 09);
215
216 INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES
217 (2424, 'Fernin George', 'Jr. Librarian', 20000.00, 09);
218
219 SELECT Branch_no, COUNT(*) AS Total_Employees
220 FROM Employee
221 GROUP BY Branch_no
222 HAVING COUNT(*) > 5;
223
224
225
226
227
228
229
230
231

```

- Result Grid:** Shows the following data:

Branch_no	Total_Employees
1	2
2	2
3	2
4	2
5	2
6	2
7	2
8	2
9	6
10	1

- Action Output:**

Time	Action	Response	Duration / Fetch Time
55 23:54:46	INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES (2424, 'Fernin George', 'Jr. Librarian', 20000.00, 09)	1 row(s) affected	0.0019 sec
56 23:54:58	SELECT Branch_no, COUNT(*) AS Total_Employees FROM Employee GROUP BY Branch_no HAVING COUNT(*) > 5 LIMIT 0, 1000	1 row(s) returned	0.0007 sec / 0.0000...
57 23:56:37	SELECT Branch_no, COUNT(*) AS Total_Employees FROM Employee GROUP BY Branch_no LIMIT 0, 1000	10 row(s) returned	0.0013 sec / 0.00000...

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

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** global\_store\_db
- Table:** ReturnStatus
- Query:**

```

209 FROM Books
210 WHERE Category = 'History';
211
212 INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES
213 (2422, 'Ancy Jacob', 'Admin', 35000.00, 09),
214 (2423, 'Mani Paul', 'Jr. Librarian', 28000.00, 09);
215
216 INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES
217 (2424, 'Fernin George', 'Jr. Librarian', 20000.00, 09);
218
219 SELECT Branch_no, COUNT(*) AS Total_Employees
220 FROM Employee
221 GROUP BY Branch_no
222 HAVING COUNT(*) > 5;
223
224 SELECT Employee.Emp_name, Branch.Branch_address
225 FROM Employee
226 JOIN Branch ON Employee.Branch_no = Branch.Branch_no
227 WHERE Employee.Position = 'Manager';
228

```

- Result Grid:** Shows the following data:

Emp_name	Branch_address
Joseph Philip	Emakulam
John Chandy	Trivandrum
Jolly John	Palakkad
Wilson Joseph	Kochi
Felix Francis	Kottayam
Jenna John	Alappuzha
Fancy Francis	Pathanamthitta
Tera Francis	Pathanamthitta
Nithin Francis	Pathanamthitta

- Action Output:**

Time	Action	Response	Duration / Fetch Time
58 23:59:54	SELECT Employee.Emp_name, Branch.Branch_address FROM Employee JOIN Branch ON Employee.Branch_no = Branch.Branch_no WHERE Employee.Position = 'Manager'	9 row(s) returned	0.031 sec / 0.000026...
59 00:01:15	SELECT DISTINCT Customer.Customer_name FROM Customer JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust...	1 row(s) returned	0.0087 sec / 0.00000...
60 00:02:18	SELECT Employee.Emp_name, Branch.Branch_address FROM Employee JOIN Branch ON Employee.Branch_no = Branch.Branch_no WHERE Employee.Position = 'Manager'	9 row(s) returned	0.0017 sec / 0.00000...

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

The screenshot shows the MySQL Workbench interface with the following details:

- Object Navigator:** Shows the schema structure with tables: Assignment04, Food\_Factory, global\_store\_db, Library, Books, Branch, Customer, Employee, IssueStatus, and ReturnStatus.
- SQL Editor:** Displays the SQL query:

```

216 • INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES
217     (2424, 'Femin George', 'Sr. Librarian', 20000.00, 09);
218
219 • SELECT Branch_no, COUNT(*) AS Total_Employees
220   FROM Employee
221   GROUP BY Branch_no
222   HAVING COUNT(*) > 5;
223
224 • SELECT Employee.Emp_name, Branch.Branch_address
225   FROM Employee
226   JOIN Branch ON Employee.Branch_no = Branch.Branch_no
227   WHERE Employee.Position = 'Manager';
228
229 • SELECT DISTINCT Customer.Customer_name
230   FROM Customer
231   JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust
232   JOIN Books ON IssueStatus.ISBN_book = Books.ISBN
233   WHERE Books.Rental_Price > 25;
234

```
- Result Grid:** Shows the result of the final query, which is a single row for "Dany Wilson".
- Action Output:** Shows the log of executed statements, including the three parts of the query and their execution times.

Time	Action	Response	Duration / Fetch Time
59 00:01:15	SELECT DISTINCT Customer.Customer_name FROM Customer JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust... 1 row(s) returned		0.0087 sec / 0.00000...
60 00:02:18	SELECT Employee.Emp_name, Branch.Branch_address FROM Employee JOIN Branch ON Employee.Branch_no = Branch.Branch_no W... 9 row(s) returned		0.0017 sec / 0.00000...
61 00:03:20	SELECT DISTINCT Customer.Customer_name FROM Customer JOIN IssueStatus ON Customer.Customer_Id = IssueStatus.Issued_cust... 1 row(s) returned		0.016 sec / 0.00065...