

LIBRARY MANAGEMENT SYSTEM

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

The screenshot shows the MySQL Workbench interface. The 'Navigator' pane on the left displays the 'library' schema. The 'SQL File 3*' editor shows a query: `select book_title,category,rental_price from Books;`. The 'Result Grid' pane displays the following data:

book_title	category	rental_price
The Story of Civilization	History	24
Sapiens: A Brief History	Non-Fiction	27
The Immortals of Meluha	Fiction	26
Percy Jackson & The Olympians	Fantasy	26
Ancient India	History	23
Half Girlfriend	Fiction	24
Rich Dad Poor Dad	Non-Fiction	23
Steve Jobs	Biography	28
Sachin Tendulkar: Playing It My Way	Biography	24
2 States	Fiction	24
The Chronicles of Narnia	Fantasy	23
Atomic Habits	Non-Fiction	25
India After Gandhi	History	28
The Diary of a Young Girl	Biography	25
I Am Malala	Biography	25
The 7 Habits	Non-Fiction	27
History of India	History	27

The 'Output' pane at the bottom shows the execution of the query, with a message: '30 row(s) returned'.

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

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

Library Project SQL File 3*

Limit to 1000 rows

212

213 • `select book_title,category,rental_price from Books;`

214

215 • `select emp_name,salary from employee order by salary desc ;`

216

Result Grid

emp_name	salary
Anjali Kulkarni	64000
Preeti Desai	63000
Mohit Jain	62000
Sunita Reddy	61000
Amit Sharma	60000
Manish Aggarwal	54000
Ajay Thakur	53000
Kiran Joshi	52000
Vikram Singh	51000
Gaurav Bhatia	51000
Rohit Kumar	50000
Shyam Pillai	50000
Abhishek Sinha	49000
Ravi Verma	48000
Priya Iyer	47000
Rajesh Das	47000
Lakshmi Nair	46000

employee 2

Output

Action Output

#	Time	Action	Message
1	09:02:51	select book_title,category,rental_price from Books LIMIT 0, 1000	30 row(s) returned
2	09:07:06	select emp_name,salary from employee order by salary desc LIMIT 0, 1000	30 row(s) returned

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

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

Library Project SQL File 3*

Limit to 1000 rows

```
216
217 • select book_title, customer_name
218 from issue_status
219 join books on ISBN_book = ISBN
220 join customer on Issued_cust = customer_id ;
```

Result Grid

book_title	customer_name
History of India	Alice Johnson
Atomic Habits	Alice Johnson
Modern Indian History	Bob Smith
The Subtle Art of Not Giving a F*ck	Bob Smith
Ancient India	Charlie Brown
Rich Dad Poor Dad	Charlie Brown
The Story of Civilization	Diana Prince
The 7 Habits	Diana Prince
India After Gandhi	Ethan Hunt
Harry Potter and the Philosopher	Ethan Hunt
The Discovery of India	Fiona Gallagher
The Immortals of Meluha	Fiona Gallagher
The Immortals of Meluha	George Lucas
The Hobbit	George Lucas
2 States	Hannah Montana
A Game of Thrones	Hannah Montana
The Alchemist	Ian Fleming

Result 3

Output

Action Output

#	Time	Action	Message
1	09:17:56	select book_title, customer_name from issue_status join books on ISBN_book = ISBN join customer on Issued...	30 row(s) returned

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

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

Library Project x SQL File 3*

Limit to 1000 rows

```
218 from issue_status
219 join books on ISBN_book = ISBN
220 join customer on Issued_cust = customer_id ;
221
222 select category, count(isbn) as 'count_of_books' from books group by Category ;
```

Result Grid

category	count_of_books
History	6
Non-Fiction	7
Fiction	5
Fantasy	6
Biography	6

Schema: library

Result 7 x

Output

Action Output

#	Time	Action	Message
1	09:27:38	select category, count(isbn) as 'count_of_books' from books group by Category LIMIT 0, 1000	5 row(s) returned

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

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

deljo

Tables

Views

Stored Procedure

Functions

library

Tables

Views

Stored Procedure

Functions

product

sales

Information

Administration Schemas

Schema: library

Library Project x SQL File 3*

Limit to 1000 rows

223

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

225

226 • `select emp_name,position from employee where salary > 50000;`

Result Grid

emp_name	position
Amit Sharma	Manager
Sunita Reddy	Manager
Vikram Singh	Assistant Manager
Mohit Jain	Manager
Kiran Joshi	Assistant Manager
Preeti Desai	Manager
Ajay Thakur	Assistant Manager
Anjali Kulkarni	Manager
Manish Aggarwal	Assistant Manager
Gaurav Bhatia	Sales Executive

employee 8 x

Output

Action Output

#	Time	Action	Message
1	09:27:38	select category.count(isbn) as 'count_of_books' from books group by Category LIMIT 0, 1000	5 row(s) returned
2	09:32:35	select emp_name,position from employee where salary > 50000 LIMIT 0, 1000	10 row(s) returned

Object Info Session

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

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

Library Project x SQL File 3* classwork(2)

Limit to 1000 rows

```
236 -- List the customer names who registered before 2022-01-01 and have not issued any books yet. --
237
238 • select customer_name from customer left join issue_status on customer.customer_id = issue_status.Issued_cust
239 where Reg_date < '2022-01-01' and issue_id is null;
```

Result Grid

customer_name
Oliver Twist
Emma Woodhouse
Elizabeth Bennet
Jay Gatsby
Holden Caulfield

Information

Schema: library

Result 11 x

Output

Action Output

#	Time	Action	Message
1	10:28:47	select customer_name from customer left join issue_status on customer.customer_id = issue_status.Issued_cust	5 row(s) returned

Object Info Session

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

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

Library Project classwork(2) SQL File 3*

Limit to 1000 rows

240

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

242

243 • `select branch_no,count(*) as employees from employee group by Branch_no;`

Result Grid

branch_no	employees
1	6
2	6
3	6
4	6
5	6

Information Schemas

Schema: library

Result 12 x

Output

Action Output

#	Time	Action	Message
1	10:41:22	select branch_no,count(*) as employees from employee group by Branch_no LIMIT 0, 1000	5 row(s) returned

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

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

deljo

- Tables
- Views
- Stored Procedure
- Functions

library

- Tables
- Views
- Stored Procedure
- Functions
- product
- sales
- eve

Library Project* classwork(2) SQL File 3*

Limit to 1000 rows

```
243 • select branch_no,count(*) as employees from employee group by Branch_no;
244
245 -- Display the names of customers who have issued books in the month of June 2023.
246
247 • SELECT c.Customer_name FROM issue_status i JOIN customer c ON i.Issued_cust = c.Customer_id
```

Result Grid

Customer_name
Jack Sparrow
Charlie Brown

Filter Rows: Export: Wrap Cell Content:

Information Schemas

Information

Schema: library

Object Info Session

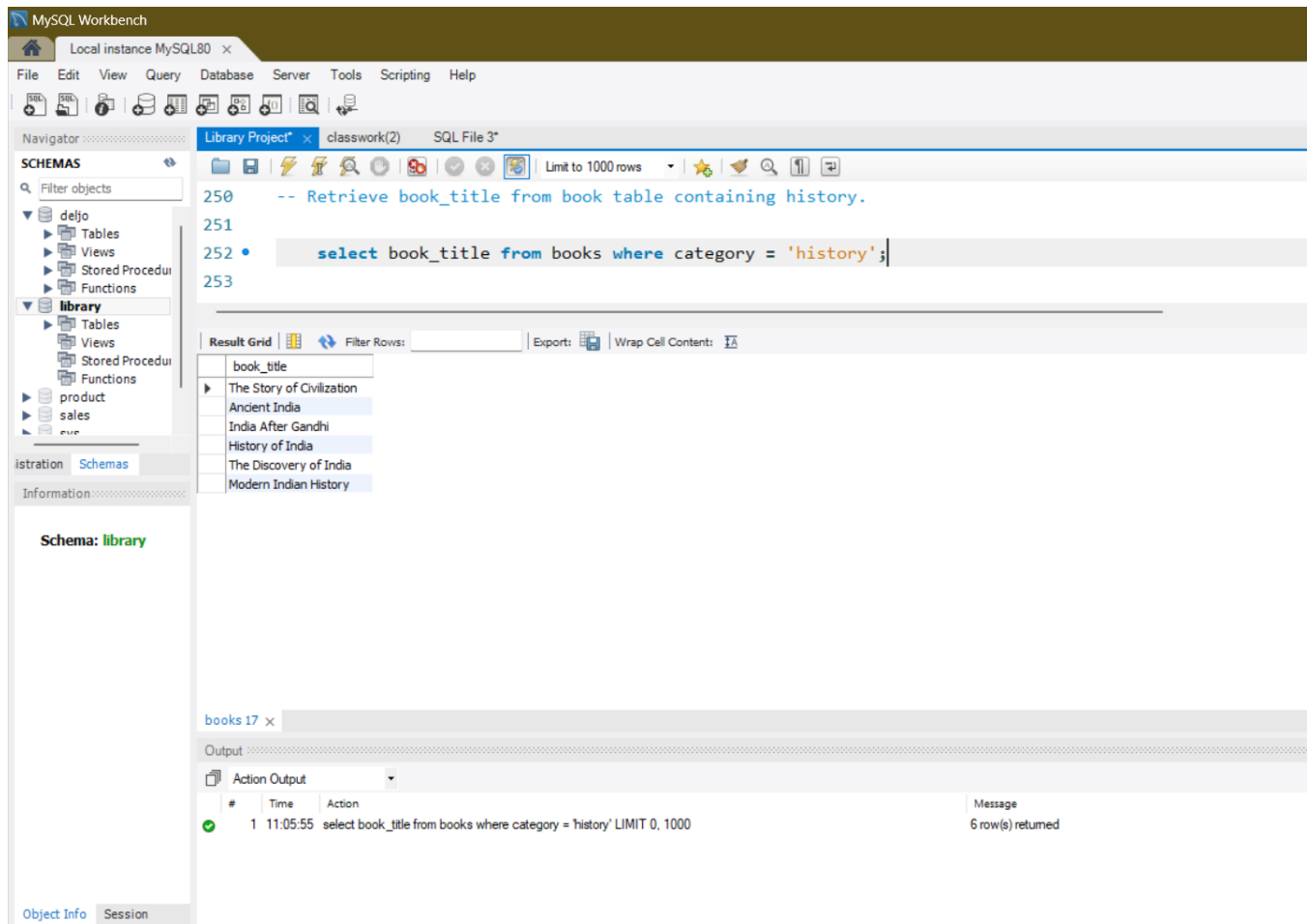
Result 16

Output

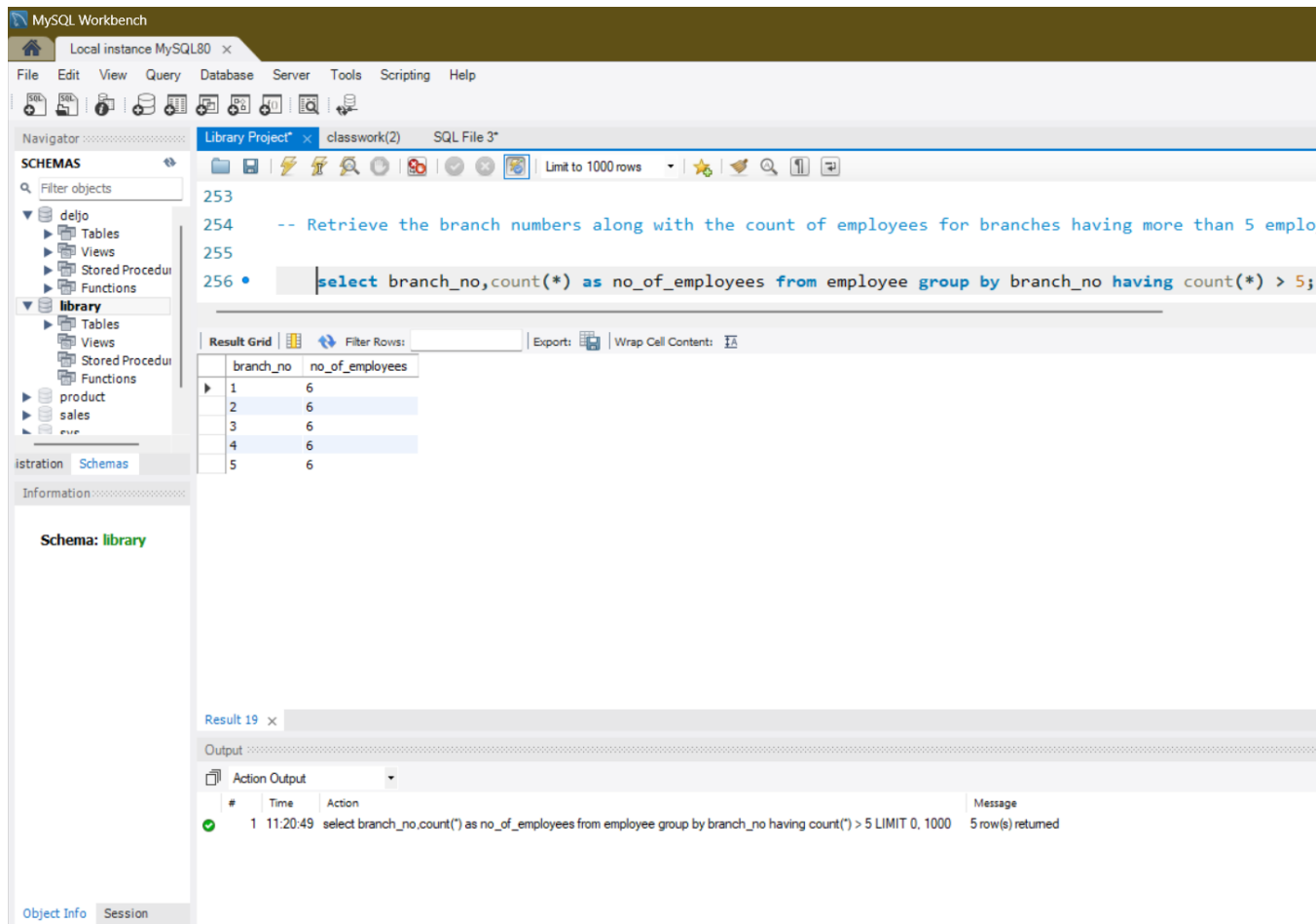
Action Output

#	Time	Action	Message
1	11:03:17	SELECT c.Customer_name FROM issue_status i JOIN customer c ON i.Issued_cust = c.Customer_id WHERE i.Issue...	2 row(s) returned

9. Retrieve book_title from 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.

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator Library Project classwork(2) SQL File 3*

Filter objects

deljo
Tables
Views
Stored Procedure
Functions

library
Tables
Views
Stored Procedure
Functions
product
sales
...

Information Schemas

Information:

Schema: library

257

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

259

260 • select emp_name, b.branch_address from employee e join branch b on e.branch_no where position = 'M

Result Grid

emp_name	branch_address
Anjali Kulkarni	Bengaluru, Karnataka
Preeti Desai	Bengaluru, Karnataka
Mohit Jain	Bengaluru, Karnataka
Sunita Reddy	Bengaluru, Karnataka
Amit Sharma	Bengaluru, Karnataka
Anjali Kulkarni	New Delhi, Delhi
Preeti Desai	New Delhi, Delhi
Mohit Jain	New Delhi, Delhi
Sunita Reddy	New Delhi, Delhi
Amit Sharma	New Delhi, Delhi
Anjali Kulkarni	Kolkata, West Bengal
Preeti Desai	Kolkata, West Bengal
Mohit Jain	Kolkata, West Bengal
Sunita Reddy	Kolkata, West Bengal
Amit Sharma	Kolkata, West Bengal
Anjali Kulkarni	Mumbai, Maharashtra
Preeti Desai	Mumbai, Maharashtra

Result 21 x

Output

Action Output

#	Time	Action	Message
1	11:32:16	select emp_name, b.branch_address from employee e join branch b on e.branch_no where position = 'Manager' LIM...	50 row(s) returned

Object Info Session

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

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator Library Project classwork(2) SQL File 3*

Limit to 1000 rows

262 -- Display the names of customers who have issued books with a rental price higher than Rs. 25.
263
264 • select c.customer_name from issue_status i
265 join customer c on i.Issued_cust = c.customer_id
266 join books b on i.ISBN_book = b.ISBN
267 where Rental_price > 25;
268

Result Grid Filter Rows: Export: Wrap Cell Content: 15

customer_name
Pam Beesly
Rachel Green
George Lucas
Michael Scott
Fiona Gallagher
Ethan Hunt
Diana Prince
Alice Johnson
Lara Croft
Steve Rogers
Oscar Wilde
Bob Smith
Bob Smith
Hannah Montana

Result 23 x

Output

Action Output

#	Time	Action	Message
1	11:32:16	select emp_name, b.branch_address from employee e join branch b on e.branch_no where position = 'Manager' LIM...	50 row(s) returned
2	11:45:31	SELECT c.Customer_name FROM issue_status i JOIN customer c ON i.Issued_cust = c.Customer_id WHERE i.Issue...	2 row(s) returned
3	11:45:34	select c.customer_name from issue_status i join customer c on i.Issued_cust = c.customer_id join books b on i.I...	14 row(s) returned

Object Info Session

SCHEMAS

Filter objects

- deljo
 - Tables
 - Views
 - Stored Procedure
 - Functions
- library
 - Tables
 - Views
 - Stored Procedure
 - Functions
- product
- sales
- eve

Information

Schema: library