

MYSQL COMPREHENSIVE ASSESMENT OUTPUT

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

The screenshot displays the MySQL Workbench interface. The 'Query' tab is active, showing a SQL query that retrieves book titles, categories, and rental prices for available books (status='yes'). The query is as follows:

```
148 (9, 9, 'Harry Potter and the Philosopher's Stone', '2023-09-30', '978-1-250-04426-4'),  
149 (10, 10, 'The Fault in Our Stars', '2023-10-15', '978-1-250-04426-4');  
150  
151  
152 #1. Retrieve the book title, category, and rental price of all available books.  
153  
154 select Book_title,Category,Rental_Price  
155 from books  
156 where status="yes";
```

The 'Result Grid' shows the following data:

Book_title	Category	Rental_Price
The Catcher in the Rye	Fiction	4.00
Pride and Prejudice	Classic	2.50
1984	Dystopian	4.99
The Alchemist	Fiction	5.00
Harry Potter and the Philosopher's Stone	Fantasy	5.99
The Fault in Our Stars	Young Adult	4.50
To Kill a Mockingbird	Fiction	3.99
The Great Gatsby	Fiction	2.99

The 'Output' tab shows the execution of the query, including the time taken and the number of rows affected. The query was executed at 20:57:10 and returned 8 rows.

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

MYSQL COMPREHENSIVE ASSESMENT OUTPUT

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
148 (9, 9, 'Harry Potter and the Philosopher's Stone', '2023-09-30', '978-1-250-84426-4'),
149 (10, 10, 'The Fault in Our Stars', '2023-10-15', '978-1-250-84426-4');
150
151
152 #1. Retrieve the book title, category, and rental price of all available books.
153
154 select Book_title,Category,Rental_Price
155 from books
156 where status="yes";
```

The Result Grid shows the following data:

Book_title	Category	Rental_Price
The Catcher in the Rye	Fiction	4.00
Pride and Prejudice	Classic	2.50
1984	Dystopian	4.99
The Alchemist	Fiction	5.00
Harry Potter and the Philosopher's Stone	Fantasy	5.99
The Fault in Our Stars	Young Adult	4.50
To Kill a Mockingbird	Fiction	3.99
The Great Gatsby	Fiction	2.99

The Output pane shows the execution log with the following messages:

```
47 20:53:03 INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES (1, 'Alice Johnson', 'Man... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0
48 20:53:15 INSERT INTO Books (ISBN, Book_title, Category, Rental_Price, Status, Author, Publisher) VALUES (978-3-16... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0
49 20:53:30 INSERT INTO Customer (Customer_Id, Customer_name, Customer_address, Reg_date) VALUES (1, 'Michael ... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0
50 20:53:46 INSERT INTO IssueStatus (Issue_Id, Issued_cust, Issued_book_name, Issue_date, Isbn_book) VALUES (1, 1... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0
51 20:54:04 INSERT INTO ReturnStatus (Return_Id, Return_cust, Return_book_name, Return_date, Isbn_book2) VALUE... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0
52 20:57:10 select Book_title,Category,Rental_Price from books where status="yes" LIMIT 0, 1000
8 row(s) returned
```

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

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
166
167 #3. Retrieve the book titles and the corresponding customers who have issued those books.
168
169 SELECT
170 B.Book_title,
171 C.Customer_name
172 FROM
173 IssueStatus I
174 JOIN
175 Books B ON I.Isbn_book = B.ISBN
176 JOIN
177 Customer C ON I.Issued_cust = C.Customer_Id;
```

The Result Grid shows the following data:

Book_title	Customer_name
The Great Gatsby	Michael Scott
To Kill a Mockingbird	Pam Beesly
1984	Jim Halpert
Pride and Prejudice	Dwight Schrute
Brave New World	Angela Martin
The Catcher in the Rye	Kevin Malone
The Alchemist	Toby Flenderson
Harry Potter and the Philosopher's Stone	Kelly Kapoor
The Fault in Our Stars	Stanley Hudson
The Fault in Our Stars	Phyllis Vance

The Output pane shows the execution log with the following messages:

```
50 20:53:46 INSERT INTO IssueStatus (Issue_Id, Issued_cust, Issued_book_name, Issue_date, Isbn_book) VALUES (1, 1... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0
51 20:54:04 INSERT INTO ReturnStatus (Return_Id, Return_cust, Return_book_name, Return_date, Isbn_book2) VALUE... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0
```

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

MYSQL COMPREHENSIVE ASSESMENT OUTPUT

The screenshot shows the MySQL Workbench interface. The 'Query Editor' contains the following SQL query:

```
# 4. Display the total count of books in each category.
SELECT
    Category,
    COUNT(*) AS Total_Books
FROM
    Books
GROUP BY
    Category;
```

The 'Result Grid' displays the following data:

Category	Total_Books
Fiction	4
Historical Fiction	1
Classic	1
Dystopian	2
Fantasy	1
Young Adult	1

The 'Action Output' pane shows the execution details for the query:

#	Time	Action	Message	Duration / Fetch
55	21:04:05	SELECT	B Book_title, C Customer_name FROM Issues I JOIN Books B ON I isbn_book = ...	10 row(s) returned 0.000 sec / 0.000 sec
56	21:09:43	SELECT	Category, COUNT(*) AS Total_Books FROM Books GROUP BY Category LIMIT 0, 1000	6 row(s) returned 0.000 sec / 0.000 sec

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

The screenshot shows the MySQL Workbench interface. The 'Query Editor' contains the following SQL query:

```
#5. Retrieve the employee names and their positions for the employees whose salaries are above Rs.50,000.
select Emp_name,Position,Salary
from Employee
where salary>50000;
```

The 'Result Grid' displays the following data:

Emp_name	Position	Salary
Dana Prince	Manager	55000.00
Hannah Baker	Manager	60000.00

The 'Action Output' pane shows the execution details for the query:

#	Time	Action	Message	Duration / Fetch
56	21:09:43	SELECT	Category, COUNT(*) AS Total_Books FROM Books GROUP BY Category LIMIT 0, 1000	6 row(s) returned 0.000 sec / 0.000 sec
57	21:11:40	select	Emp_name,Position,Salary from Employee where salary>50000 LIMIT 0, 1000	2 row(s) returned 0.016 sec / 0.000 sec

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

MYSQL COMPREHENSIVE ASSESMENT OUTPUT

The screenshot shows the MySQL Workbench interface. The 'Query Editor' contains the following SQL query:

```
#6. List the customer names who registered before 2022-01-01 and have not issued any books yet.
SELECT
  C.Customer_name
FROM
  Customer C
LEFT JOIN
  IssueStatus I ON C.Customer_Id = I.Issued_cust
WHERE
  C.Reg_date < '2022-01-01'
  AND I.Issued_cust IS NULL;
```

The 'Result Grid' is empty, showing 'No object selected'. The 'Output' pane shows the execution log with the following entry:

#	Time	Action	Message	Duration / Fetch
59	21:16:08	SELECT C.Customer_name FROM Customer C LEFT JOIN IssueStatus I ON C.Customer_Id = I.Issued_cust	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'I.Issued_cust' at line 1	0.015 sec / 0.000 sec

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

The screenshot shows the MySQL Workbench interface. The 'Query Editor' contains the following SQL query:

```
#7. Display the branch numbers and the total count of employees in each branch.
SELECT
  B.Branch_no,
  COUNT(E.Emp_Id) AS Total_Employees
FROM
  Branch B
LEFT JOIN
  Employee E ON B.Branch_no = E.Branch_no
GROUP BY
  B.Branch_no;
```

The 'Result Grid' displays the following data:

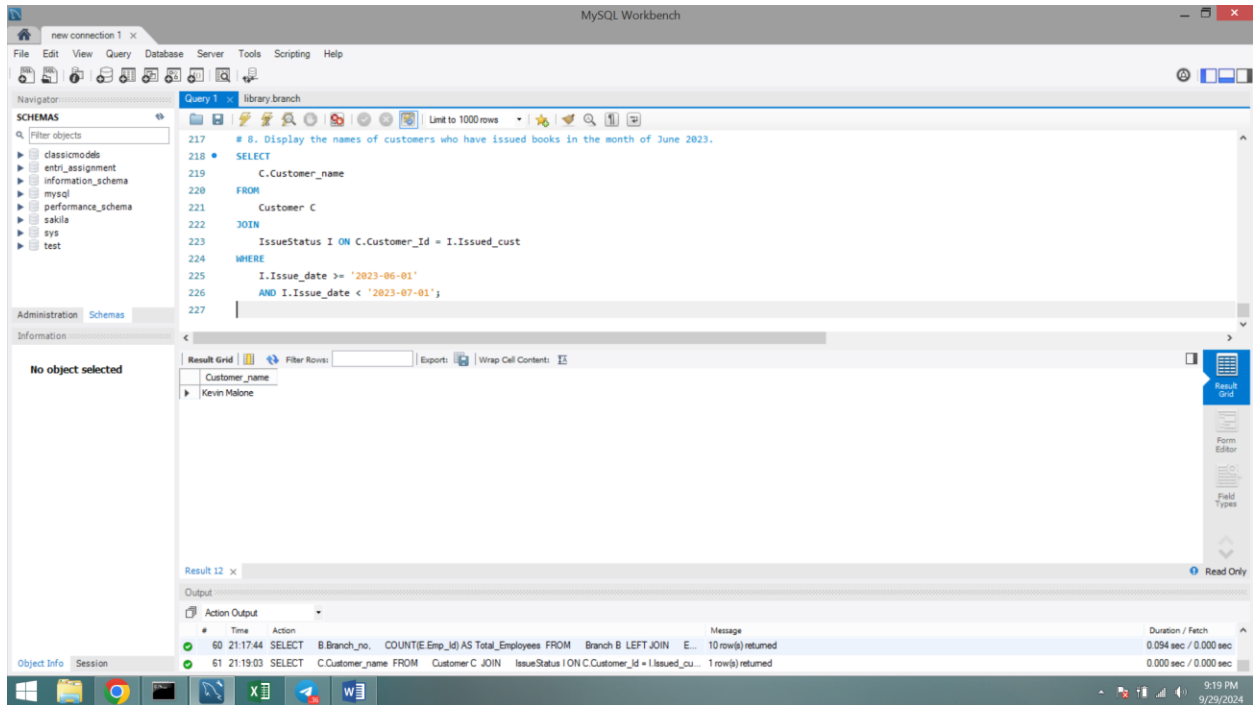
Branch_no	Total_Employees
1	2
2	2
3	1
4	1
5	2
6	1
7	1
8	0
9	0
10	0

The 'Output' pane shows the execution log with the following entry:

#	Time	Action	Message	Duration / Fetch
60	21:17:44	SELECT B.Branch_no, COUNT(E.Emp_Id) AS Total_Employees FROM Branch B LEFT JOIN Employee E ON B.Branch_no = E.Branch_no	10 row(s) returned	0.094 sec / 0.000 sec

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

MYSQL COMPREHENSIVE ASSESMENT OUTPUT



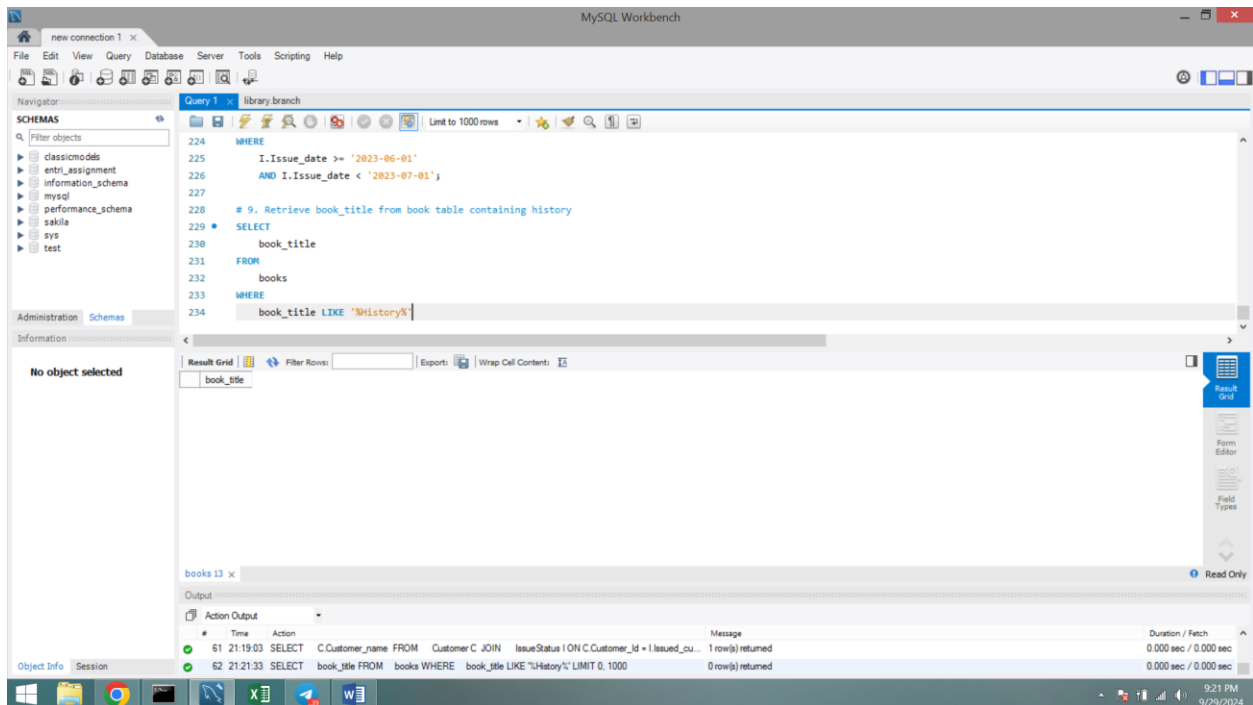
The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying a SQL query to retrieve customer names who issued books in June 2023. The query is as follows:

```
217 # 8. Display the names of customers who have issued books in the month of June 2023.
218 SELECT
219     C.Customer_name
220 FROM
221     Customer C
222 JOIN
223     IssueStatus I ON C.Customer_Id = I.Issued_cust
224 WHERE
225     I.Issue_date >= '2023-06-01'
226     AND I.Issue_date < '2023-07-01';
227
```

The 'Result Grid' shows one result: Kevin Malone. The 'Output' tab shows the execution log with the following details:

#	Time	Action	Message	Duration / Fetch
60	21:17:44	SELECT B.Branch_no, COUNT(Emp_Id) AS Total_Employees FROM Branch B LEFT JOIN E...	10 row(s) returned	0.094 sec / 0.000 sec
61	21:19:03	SELECT C.Customer_name FROM Customer C JOIN IssueStatus I ON C.Customer_Id = I.Issued_cu...	1 row(s) returned	0.000 sec / 0.000 sec

9. Retrieve book_title from book table containing history.



The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying a SQL query to retrieve book titles containing the word 'History'. The query is as follows:

```
224 WHERE
225     I.Issue_date >= '2023-06-01'
226     AND I.Issue_date < '2023-07-01';
227
228 # 9. Retrieve book_title from book table containing history
229 SELECT
230     book_title
231 FROM
232     books
233 WHERE
234     book_title LIKE '%History%';
```

The 'Result Grid' shows one result: book_title. The 'Output' tab shows the execution log with the following details:

#	Time	Action	Message	Duration / Fetch
61	21:19:03	SELECT C.Customer_name FROM Customer C JOIN IssueStatus I ON C.Customer_Id = I.Issued_cu...	1 row(s) returned	0.000 sec / 0.000 sec
62	21:21:33	SELECT book_title FROM books WHERE book_title LIKE '%History%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec

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

MYSQL COMPREHENSIVE ASSESMENT OUTPUT

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
277 # 10.Retrieve the branch numbers along with the count of employees for branches having more than 5 employee
278 SELECT
279     B.Branch_no,
280     COUNT(E.Emp_Id) AS Total_Employees
281 FROM
282     Branch B
283 JOIN
284     Employee E ON B.Branch_no = E.Branch_no
285 GROUP BY
286     B.Branch_no
287 HAVING
288     COUNT(E.Emp_Id) > 5;
```

The Result Grid shows the following data:

Branch_no	Total_Employees
1	8

The Output pane shows the following message:

```
83 21:40:05 INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES (21, 'Alice Johnson', 'Ma... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0
84 21:40:14 SELECT B.Branch_no, COUNT(E.Emp_Id) AS Total_Employees FROM Branch B JOIN Employee ... 1 row(s) returned 0.000 sec / 0.000 sec
```

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

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
270
271 #11. Retrieve the names of employees who manage branches and their respective branch addresses.
272
273 SELECT
274     e.Emp_name AS Employee_Name,
275     b.Branch_address AS Branch_Address
276 FROM
277     Employee e
278 JOIN
279     Branch b ON e.Emp_Id = b.Manager_Id;
```

The Result Grid shows the following data:

Employee_Name	Branch_Address
Charlie Brown	789 Pine St

The Output pane shows the following message:

```
78 21:35:33 INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALUES ((11, 'Charlie', 'Manage... 1 row(s) affected
79 21:35:49 SELECT e.Emp_name AS Employee_Name, b.Branch_address AS Branch_Address FROM Employee... 1 row(s) returned 0.000 sec / 0.000 sec
```

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

MYSQL COMPREHENSIVE ASSESMENT OUTPUT

25.

The screenshot displays the MySQL Workbench interface. The left sidebar shows the 'SCHEMAS' list with 'sakila' selected. The main query editor contains the following SQL code:

```
321 #12. Display the names of customers who have issued books with a rental price higher than Rs. 25.
322 SELECT DISTINCT
323     C.Customer_name
324 FROM
325     Customer C
326 JOIN
327     IssueStatus I ON C.Customer_Id = I.Issued_cust
328 JOIN
329     Books B ON I.Isbn_book = B.ISBN
330 WHERE
331     B.Rental_Price > 25;
332
```

The 'Result Grid' shows the following data:

Customer_name
Michael Scott
Pam Beesly
Jim Halpert
Dwight Schrute

The 'Action Output' pane at the bottom shows the execution results:

#	Time	Action	Message	Duration / Fetch
89	21:45:18	INSERT INTO Customer (Customer_Id, Customer_name, Customer_address, Reg_date) VALUES (11, 'Alice Jo...)	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.109 sec
90	21:45:24	SELECT DISTINCT C.Customer_name FROM Customer C JOIN IssueStatus I ON C.Customer_Id = I.	4 row(s) returned	0.000 sec / 0.000 sec

The system clock at the bottom right indicates 9:45 PM on 9/29/2024.