SQL TASK 3 - Muhammad Baqiel
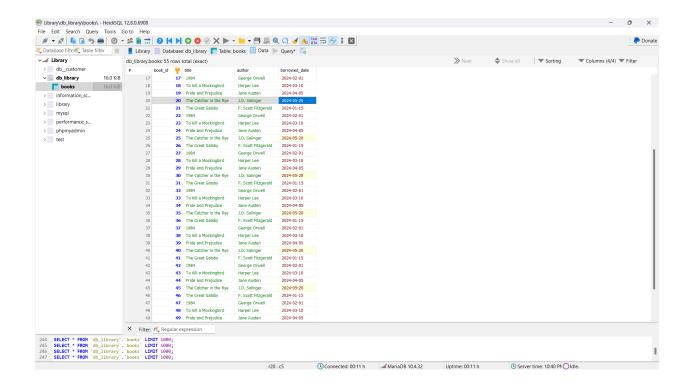

Create the Database

CREATE DATABASE db_library;

```sql
CREATE TABLE books (
    book_id INT AUTO_INCREMENT PRIMARY KEY,
    title VARCHAR(255),
    author VARCHAR(255),
    borrowed_date DATE
);
```

```sql
INSERT INTO books (title, author, borrowed_date)
VALUES
('The Great Gatsby', 'F. Scott Fitzgerald', '2024-01-15'),
('1984', 'George Orwell', '2024-02-01'),
('To Kill a Mockingbird', 'Harper Lee', '2024-03-10'),
('Pride and Prejudice', 'Jane Austen', '2024-04-05'),
```

('The Catcher in the Rye', 'J.D. Salinger', '2024-05-20');

SELECT * FROM `db_library`.`books` LIMIT 5;

Library\db_library\books\ - HeidiSQL 12.8.0.6908

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| Library | Database: db_library | Table: books | Data | Query* |

```
1  SELECT * FROM `db_library`.`books` LIMIT 5;
```

books (5r × 4c)

#	book_id	title	author	borrowed_date
1	1	The Great Gatsby	F. Scott Fitzgerald	2024-01-15
2	2	1984	George Orwell	2024-02-01
3	3	To Kill a Mockingbird	Harper Lee	2024-03-10
4	4	Pride and Prejudice	Jane Austen	2024-04-05
5	5	The Catcher in the Rye	J.D. Salinger	2024-05-20

Query Operations

SELECT * FROM books;

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Database filter   Table filter

- Library
  - db__customer
  - db_library   16.0 KiB
    - books   16.0 KiB
  - information_sc...
  - library
  - mysql
  - performance_s...
  - phpmyadmin
  - test

Library   Database: db_library   Table: books   Data   Query*

```
1   SELECT * FROM books;
2
```

books (55r × 4c)

#	book_id	title	author	borrowed_date
1	1	The Great Gatsby	F. Scott Fitzgerald	2024-01-15
2	2	1984	George Orwell	2024-02-01
3	3	To Kill a Mockingbird	Harper Lee	2024-03-10
4	4	Pride and Prejudice	Jane Austen	2024-04-05
5	5	The Catcher in the Rye	J.D. Salinger	2024-05-20
6	6	The Great Gatsby	F. Scott Fitzgerald	2024-01-15
7	7	1984	George Orwell	2024-02-01
8	8	To Kill a Mockingbird	Harper Lee	2024-03-10
9	9	Pride and Prejudice	Jane Austen	2024-04-05
10	10	The Catcher in the Rye	J.D. Salinger	2024-05-20
11	11	The Great Gatsby	F. Scott Fitzgerald	2024-01-15
12	12	1984	George Orwell	2024-02-01
13	13	To Kill a Mockingbird	Harper Lee	2024-03-10
14	14	Pride and Prejudice	Jane Austen	2024-04-05
15	15	The Catcher in the Rye	J.D. Salinger	2024-05-20
16	16	The Great Gatsby	F. Scott Fitzgerald	2024-01-15
17	17	1984	George Orwell	2024-02-01
18	18	To Kill a Mockingbird	Harper Lee	2024-03-10
19	19	Pride and Prejudice	Jane Austen	2024-04-05
20	20	The Catcher in the Rye	J.D. Salinger	2024-05-20
21	21	The Great Gatsby	F. Scott Fitzgerald	2024-01-15
22	22	1984	George Orwell	2024-02-01
23	23	To Kill a Mockingbird	Harper Lee	2024-03-10

Filter: Regular expression
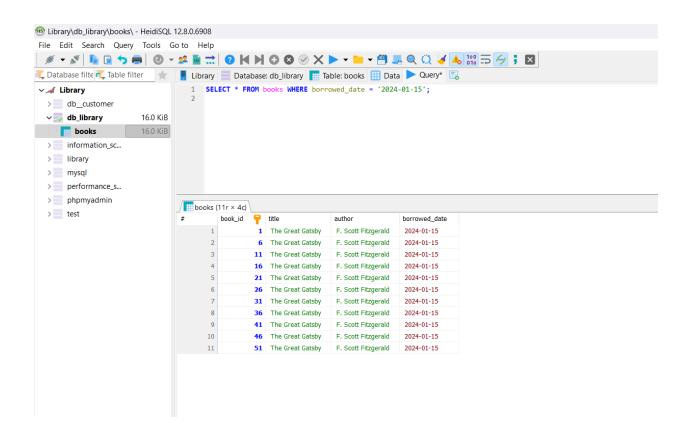
SELECT * FROM books WHERE author = 'Harper Lee';

SELECT * FROM books WHERE borrowed_date = '2024-01-15';

SELECT * FROM books WHERE borrowed_date > '2024-03-01';

Data Manipulation

UPDATE books
SET title = 'The Great Gatsby: Revised Edition'
WHERE book_id = 1;

UPDATE books

SET author = 'Fitzgerald Scott'

WHERE author = 'F. Scott Fitzgerald';

UPDATE books

SET borrowed_date = CASE

WHEN book_id = 2 THEN (SELECT borrowed_date FROM books WHERE book_id = 3)

WHEN book_id = 3 THEN (SELECT borrowed_date FROM books WHERE book_id = 2)

END

WHERE book_id IN (2, 3);

File   Edit   Search   Query   Tools   Go to   Help

Donate

Database filte   Table filter

Library   Database: db_library   Table: books   Data   Query*

db_library.books: 54 rows total (exact)

Next   Show all   Sorting   Columns (4/4)   Filter

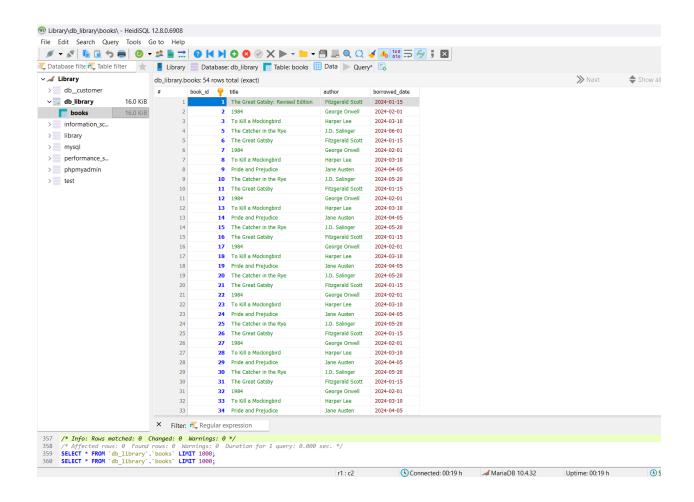| #	book_id	title	author	borrowed_date
1	1	The Great Gatsby: Revised Edition	Fitzgerald Scott	2024-01-15
2	2	1984	George Orwell	2024-02-01
3	3	To Kill a Mockingbird	Harper Lee	2024-03-10
4	5	The Catcher in the Rye	J.D. Salinger	2024-06-01
5	6	The Great Gatsby	Fitzgerald Scott	2024-01-15
6	7	1984	George Orwell	2024-02-01
7	8	To Kill a Mockingbird	Harper Lee	2024-03-10
8	9	Pride and Prejudice	Jane Austen	2024-04-05
9	10	The Catcher in the Rye	J.D. Salinger	2024-05-20
10	11	The Great Gatsby	Fitzgerald Scott	2024-01-15
11	12	1984	George Orwell	2024-02-01
12	13	To Kill a Mockingbird	Harper Lee	2024-03-10
13	14	Pride and Prejudice	Jane Austen	2024-04-05
14	15	The Catcher in the Rye	J.D. Salinger	2024-05-20
15	16	The Great Gatsby	Fitzgerald Scott	2024-01-15
16	17	1984	George Orwell	2024-02-01
17	18	To Kill a Mockingbird	Harper Lee	2024-03-10
18	19	Pride and Prejudice	Jane Austen	2024-04-05
19	20	The Catcher in the Rye	J.D. Salinger	2024-05-20
20	21	The Great Gatsby	Fitzgerald Scott	2024-01-15
21	22	1984	George Orwell	2024-02-01
22	23	To Kill a Mockingbird	Harper Lee	2024-03-10
23	24	Pride and Prejudice	Jane Austen	2024-04-05
24	25	The Catcher in the Rye	J.D. Salinger	2024-05-20
25	26	The Great Gatsby	Fitzgerald Scott	2024-01-15
26	27	1984	George Orwell	2024-02-01
27	28	To Kill a Mockingbird	Harper Lee	2024-03-10
28	29	Pride and Prejudice	Jane Austen	2024-04-05
29	30	The Catcher in the Rye	J.D. Salinger	2024-05-20
30	31	The Great Gatsby	Fitzgerald Scott	2024-01-15
31	32	1984	George Orwell	2024-02-01
32	33	To Kill a Mockingbird	Harper Lee	2024-03-10
33	34	Pride and Prejudice	Jane Austen	2024-04-05

Library
  db_customer
  db_library   16.0 KiB
    books   16.0 KiB
    information_sc...
    library
    mysql
    performance_s...
    phpmyadmin
    test

Filter: Regular expression

```
376   /*   */
377   /* Info: Rows matched: 2  Changed: 2  Warnings: 0 */
378   /* Affected rows: 2  Found rows: 0  Warnings: 0  Duration for 1 query: 0.016 sec. */
379   SELECT * FROM `db_library`.`books` LIMIT 1000;
```

r1 : c5   Connected: 00:20 h   MariaDB 10.4.32   Uptime: 00:20 h   Server time: 10:49 PM   Idle.