CREATE DATABASE sample\_library;

USE sample\_library;

CREATE TABLE books (

id INT AUTO\_INCREMENT PRIMARY KEY,

title VARCHAR(255) NOT NULL,

author VARCHAR(255),

genre VARCHAR(100),

page\_count INT,

published\_year INT

);

INSERT INTO books (title, author, genre, page\_count, published\_year) VALUES

('The Hobbit', 'J.R.R. Tolkien', 'fantasy', 310, 1937),

('1984', 'George Orwell', 'dystopian', 328, 1949),

('Harry Potter and the Sorcerer''s Stone', 'J.K. Rowling', 'fantasy', 309, 1997),

('To Kill a Mockingbird', 'Harper Lee', 'classic', 281, 1960),

('The Great Gatsby', 'F. Scott Fitzgerald', 'classic', 180, 1925),

('A Game of Thrones', 'George R.R. Martin', 'fantasy', 694, 1996);

SELECT \* FROM books;

SELECT title, author

FROM books

WHERE genre = 'fantasy';

SELECT COUNT(\*) AS total\_books FROM books;

SELECT SUM(page\_count) AS total\_pages FROM books;

SELECT MIN(page\_count) AS min\_pages, MAX(page\_count) AS max\_pages FROM books;

SELECT \*

FROM books

ORDER BY title ASC

LIMIT 5;

SELECT \*

FROM books

WHERE genre = 'fantasy' AND page\_count > 300;

SELECT genre, COUNT(\*) AS book\_count

FROM books

GROUP BY genre;

SELECT genre, COUNT(\*) AS book\_count

FROM books

GROUP BY genre

HAVING COUNT(\*) > 5;

CREATE TABLE customers (

customer\_id INT PRIMARY KEY,

name VARCHAR(255),

email VARCHAR(255) UNIQUE,

phone\_number CHAR(10)

);

INSERT INTO customers (customer\_id, name, email, phone\_number) VALUES

(1, 'John Doe', 'john.doe@example.com', '1234567890'),

(2, 'Jane Smith', 'jane.smith@example.com', '0987654321'),

(3, 'Alice Johnson', 'alice.johnson@example.com', NULL);

UPDATE customers

SET email = 'new\_email@example.com'

WHERE customer\_id = 1;

DELETE FROM customers

WHERE phone\_number IS NULL;

ALTER TABLE customers

ADD city VARCHAR(255);

SELECT \* FROM customers;





















