

-- 1. Admins

```
CREATE TABLE Admins (  
    admin_id INT PRIMARY KEY,  
    name VARCHAR(100),  
    email VARCHAR(100),  
    phone VARCHAR(15),  
    role VARCHAR(50),  
    created_at VARCHAR(10)  
);
```

-- 2. Categories

```
CREATE TABLE Categories (  
    category_id INT PRIMARY KEY,  
    name VARCHAR(50),  
    description TEXT,  
    created_by INT,  
    created_at VARCHAR(10),  
    status VARCHAR(20),  
    FOREIGN KEY (created_by) REFERENCES Admins(admin_id)  
);
```

-- 3. Books

```
CREATE TABLE Books (  
    book_id INT PRIMARY KEY,  
    title VARCHAR(100),  
    author VARCHAR(100),  
    genre VARCHAR(50),  
    price DECIMAL(6,2),
```

```
stock INT,  
category_id INT,  
FOREIGN KEY (category_id) REFERENCES Categories(category_id)  
);
```

-- 4. Customers

```
CREATE TABLE Customers (  
    customer_id INT PRIMARY KEY,  
    name VARCHAR(100),  
    email VARCHAR(100),  
    phone VARCHAR(15),  
    address VARCHAR(200),  
    registration_date VARCHAR(10)  
);
```

-- 5. Orders

```
CREATE TABLE Orders (  
    order_id INT PRIMARY KEY,  
    customer_id INT,  
    order_date VARCHAR(10),  
    total_amount DECIMAL(8,2),  
    payment_status VARCHAR(20),  
    delivery_status VARCHAR(20),  
    FOREIGN KEY (customer_id) REFERENCES Customers(customer_id)  
);
```

-- 6. Order_Items

```
CREATE TABLE Order_Items (  
    item_id INT PRIMARY KEY,
```

```
order_id INT,  
book_id INT,  
quantity INT,  
price DECIMAL(6,2),  
subtotal DECIMAL(8,2),  
FOREIGN KEY (order_id) REFERENCES Orders(order_id),  
FOREIGN KEY (book_id) REFERENCES Books(book_id)  
);
```

-- 7. Reviews

```
CREATE TABLE Reviews (  
    review_id INT PRIMARY KEY,  
    book_id INT,  
    customer_id INT,  
    rating INT,  
    comment TEXT,  
    review_date VARCHAR(10),  
    FOREIGN KEY (book_id) REFERENCES Books(book_id),  
    FOREIGN KEY (customer_id) REFERENCES Customers(customer_id)  
);
```

```
INSERT INTO Admins VALUES  
(1, 'admin1', 'admin1@gmail.com', '016561234', 'Manager', '01-01-2023'),  
(2, 'admin2', 'admin2@gmail.com', '25451234', 'Manager', '01-02-2023'),  
(3, 'admin3', 'admin3@gmail.com', '04551234', 'Staff', '01-03-2023'),  
(4, 'admin4', 'admin4@gmail.com', '1532334', 'Staff', '15-03-2023'),  
(5, 'admin5', 'admin5@gmail.com', '12336984', 'Manager', '01-04-2023'),  
(6, 'admin6', 'admin6@gmail.com', '1233684', 'Staff', '05-04-2023'),  
(7, 'admin7', 'admin7@gmail.com', '12338634', 'Staff', '10-04-2023'),
```

(8, 'admin8', 'admin8@gmail.com', '126938534', 'Manager', '15-04-2023'),
(9, 'admin9', 'admin9@gmail.com', '12334534', 'Staff', '18-04-2023'),
(10, 'admin10', 'admin10@gmail.com', '12354334', 'Staff', '20-04-2023'),
(11, 'admin11', 'admin11@gmail.com', '123425744', 'Manager', '22-04-2023'),
(12, 'admin12', 'admin12@gmail.com', '1275274534', 'Staff', '24-04-2023'),
(13, 'admin13', 'admin13@gmail.com', '1252434', 'Manager', '25-04-2023'),
(14, 'admin14', 'admin14@gmail.com', '1578237234', 'Staff', '26-04-2023'),
(15, 'admin15', 'admin15@gmail.com', '12543234', 'Staff', '27-04-2023'),
(16, 'admin16', 'admin16@gmail.com', '1235244', 'Manager', '28-04-2023'),
(17, 'admin17', 'admin17@gmail.com', '1237543274', 'Staff', '29-04-2023'),
(18, 'admin18', 'admin18@gmail.com', '123753274', 'Staff', '30-04-2023');

INSERT INTO Categories (category_id, name, description, created_by, created_at, status) VALUES

(1, 'Fiction', 'Stories that are imaginative and not real.', 1, '29-04-2025', 'Active'),
(2, 'Self-help', 'Books that guide personal development.', 3, '29-04-2025', 'Active'),
(3, 'Dystopian', 'Fictional society in decline or oppression.', 1, '15-04-2025', 'Active'),
(4, 'Classic', 'Timeless literary works.', 2, '29-04-2025', 'Active'),
(5, 'History', 'Books based on historical events.', 1, '18-03-2025', 'Active'),
(6, 'Finance', 'Books about managing money.', 1, '29-04-2025', 'Active'),
(7, 'Thriller', 'Books full of suspense and excitement.', 6, '29-04-2025', 'Stock Out'),
(8, 'Drama', 'Emotional and realistic storytelling.', 1, '10-04-2025', 'Active'),
(9, 'Mystery', 'Books about solving crimes or puzzles.', 9, '10-04-2025', 'Active'),
(10, 'Memoir', 'Personal life stories.', 2, '12-03-2025', 'Active'),
(11, 'Biography', 'Books about famous people.', 1, '14-04-2025', 'Active'),
(12, 'Science', 'Books exploring scientific topics.', 1, '22-03-2025', 'Active'),
(13, 'Religion', 'Books about religious beliefs.', 4, '29-04-2025', 'Active'),
(14, 'Politics', 'Books related to political theory or history.', 1, '29-04-2025', 'Active'),
(15, 'Poetry', 'Books of poems.', 8, '23-04-2025', 'Active'),
(16, 'Philosophy', 'Books on thinking and wisdom.', 7, '20-03-2025', 'Active'),

(17, 'Technology', 'Books on modern tech trends.', 1, '29-04-2025', 'Active'),
(18, 'Romance', 'Love and relationship stories.', 6, '29-04-2025', 'Active');

INSERT INTO Books VALUES

(1, 'The Alchemist', 'Paulo Coelho', 'Fiction', 12.99, 20,1),
(2, 'Atomic Habits', 'James Clear', 'Self-help', 15.50, 15,2),
(3, '1984', 'George Orwell', 'Dystopian', 11.00, 25,3),
(4, 'To Kill a Mockingbird', 'Harper Lee', 'Classic', 10.99, 30,4),
(5, 'The Subtle Art...', 'Mark Manson', 'Self-help', 13.75, 18,2),
(6, 'Sapiens', 'Yuval Noah Harari', 'History', 17.80, 22,5),
(7, 'Think and Grow Rich', 'Napoleon Hill', 'Self-help', 14.00, 16,2),
(8, 'Rich Dad Poor Dad', 'Robert Kiyosaki', 'Finance', 9.99, 27,6),
(9, 'Crime and Punishment', 'Fyodor Dostoevsky', 'Classic', 13.49, 12,3),
(10, 'The Book Thief', 'Markus Zusak', 'Historical', 12.30, 21,5),
(11, 'The Power of Habit', 'Charles Duhigg', 'Self-help', 14.25, 19,2),
(12, 'Digital Fortress', 'Dan Brown', 'Thriller', 11.75, 20,7),
(13, 'The Da Vinci Code', 'Dan Brown', 'Thriller', 12.50, 14,7),
(14, 'Inferno', 'Dan Brown', 'Thriller', 13.25, 23,7),
(15, 'The Kite Runner', 'Khaled Hosseini', 'Drama', 12.99, 18,8),
(16, 'A Thousand Splendid Suns', 'Khaled Hosseini', 'Drama', 13.45, 17,8),
(17, 'The Girl on the Train', 'Paula Hawkins', 'Mystery', 11.60, 26,9),
(18, 'Educated', 'Tara Westover', 'Memoir', 10.95, 15,10);

INSERT INTO Customers VALUES

(1, 'Ayesha Khan', 'ayesha@mail.com', '01711112222', 'Dhaka', '10-01-2024'),
(2, 'Mehedi Hasan', 'mehedi@mail.com', '01712345678', 'Chittagong', '12-01-2024'),
(3, 'Tania Rahman', 'tania@mail.com', '01811113333', 'Sylhet', '01-02-2024'),
(4, 'Junaid Alam', 'junaid@mail.com', '01719876543', 'Dhaka', '05-02-2024'),
(5, 'Nusrat Jahan', 'nusrat@mail.com', '01688889999', 'Khulna', '10-02-2024'),
(6, 'Arif Hossain', 'arif@mail.com', '01923456789', 'Rajshahi', '15-02-2024'),

(7, 'Farhana Noor', 'farhana@mail.com', '01745678901', 'Comilla', '18-02-2024'),
(8, 'Tamim Iqbal', 'tamim@mail.com', '01899990000', 'Barisal', '01-03-2024'),
(9, 'Jannat Ara', 'jannat@mail.com', '01911112222', 'Rangpur', '05-03-2024'),
(10, 'Sakib Ali', 'sakib@mail.com', '01776543210', 'Mymensingh', '08-03-2024'),
(11, 'Salma Akter', 'salma@mail.com', '01711223344', 'Sylhet', '11-03-2024'),
(12, 'Shuvo Rahman', 'shuvo@mail.com', '01812344321', 'Bogura', '15-03-2024'),
(13, 'Lamia Haque', 'lamia@mail.com', '01987654321', 'Dhaka', '17-03-2024'),
(14, 'Munna Hossain', 'munna@mail.com', '01799887766', 'Chandpur', '20-03-2024'),
(15, 'Rifat Karim', 'rifat@mail.com', '01845678912', 'Kushtia', '25-03-2024'),
(16, 'Shamima Nasrin', 'shamima@mail.com', '01722334455', 'Noakhali', '28-03-2024'),
(17, 'Saif Ahmed', 'saif@mail.com', '01833221100', 'Cox's Bazar', '01-04-2024'),
(18, 'Nadia Islam', 'nadia@mail.com', '01955667788', 'Dhaka', '05-04-2024');

INSERT INTO Orders VALUES

(1, 1, '2024-04-10', 25.98, 'Paid', 'Delivered'),
(2, 2, '2024-04-11', 15.50, 'Unpaid', 'Pending'),
(3, 3, '2024-04-11', 22.00, 'Paid', 'Shipped'),
(4, 3, '2024-04-12', 10.99, 'Paid', 'Delivered'),
(5, 5, '2024-04-13', 13.75, 'Paid', 'Processing'),
(6, 6, '2024-04-14', 17.80, 'Unpaid', 'Cancelled'),
(7, 6, '2024-04-14', 28.00, 'Paid', 'Delivered'),
(8, 8, '2024-04-15', 26.49, 'Paid', 'Delivered'),
(9, 9, '2024-04-16', 36.75, 'Paid', 'Pending'),
(10, 10, '2024-04-16', 13.25, 'Paid', 'Delivered'),
(11, 11, '2024-04-17', 12.99, 'Unpaid', 'Pending'),
(12, 6, '2024-04-17', 25.94, 'Paid', 'Shipped'),
(13, 13, '2024-04-18', 24.55, 'Paid', 'Delivered'),
(14, 14, '2024-04-18', 27.50, 'Paid', 'Delivered'),
(15, 6, '2024-04-19', 29.95, 'Unpaid', 'Processing'),

```
(16, 18, '2024-04-19', 14.00, 'Paid', 'Delivered'),  
(17, 8, '2024-04-20', 31.80, 'Paid', 'Shipped'),  
(18, 18, '2024-04-21', 15.45, 'Paid', 'Delivered');
```

```
INSERT INTO Order_Items VALUES
```

```
(1, 1, 1, 1, 12.99, 12.99),  
(2, 1, 2, 1, 12.99, 12.99),  
(3, 2, 2, 1, 15.50, 15.50),  
(4, 3, 3, 2, 11.00, 22.00),  
(5, 4, 4, 1, 10.99, 10.99),  
(6, 5, 5, 1, 13.75, 13.75),  
(7, 6, 6, 1, 17.80, 17.80),  
(8, 7, 3, 2, 11.00, 22.00),  
(9, 7, 8, 1, 6.00, 6.00),  
(10, 8, 9, 1, 13.49, 13.49),  
(11, 8, 10, 1, 12.99, 12.99),  
(12, 9, 11, 1, 14.25, 14.25),  
(13, 9, 5, 2, 11.25, 22.50),  
(14, 10, 14, 1, 13.25, 13.25),  
(15, 11, 15, 1, 12.99, 12.99),  
(16, 12, 16, 2, 12.97, 25.94),  
(17, 13, 17, 1, 11.60, 11.60),  
(18, 13, 18, 1, 12.95, 12.95);
```

```
INSERT INTO Reviews VALUES
```

```
(1, 1, 1, 5, 'Amazing book!', '01-04-2024'),  
(2, 2, 2, 4, 'Very helpful.', '01-04-2024'),  
(3, 3, 3, 3, 'Quite interesting.', '02-04-2024'),  
(4, 4, 4, 5, 'Loved the story.', '02-04-2024'),  
(5, 5, 5, 4, 'Motivating read.', '03-04-2024'),
```

(6, 6, 6, 5, 'Highly recommended.', '03-04-2024'),
(7, 7, 7, 3, 'Good but slow.', '04-04-2024'),
(8, 8, 8, 2, 'Not as expected.', '04-04-2024'),
(9, 9, 9, 5, 'Masterpiece!', '05-04-2024'),
(10, 10, 10, 4, 'Emotional journey.', '05-04-2024'),
(11, 11, 11, 3, 'Informative.', '06-04-2024'),
(12, 12, 12, 4, 'Thrilling!', '06-04-2024'),
(13, 13, 13, 5, 'Best in the series.', '07-04-2024'),
(14, 14, 14, 4, 'Great plot.', '07-04-2024'),
(15, 15, 15, 5, 'Deeply touching.', '08-04-2024'),
(16, 16, 16, 4, 'Lovely writing.', '08-04-2024'),
(17, 17, 17, 2, 'Confusing ending.', '09-04-2024'),
(18, 18, 18, 5, 'Truly inspiring.', '09-04-2024');

select * from Books; --Shows all book records.

SELECT * FROM Customers; --Shows all customer records

SELECT * FROM Orders ; --Shows all order records

SELECT * FROM Categories; --Shows all book categories

SELECT * FROM Admins; --Shows all admin users

SELECT * FROM Reviews; --Shows all book reviews

SELECT * FROM Order_Items; --Shows all items included in orders

SELECT * FROM Orders WHERE order_date BETWEEN '2024-04-17' AND '2024-04-30'; --Shows orders placed between April 17 and April 30, 2024

SELECT * FROM Books WHERE stock < 15; --Shows books with stock less than 15

SELECT * FROM Admins WHERE role = 'Manager'; --Shows all admins with the role "Manager"

SELECT customer_id, total_amount, Payment_status FROM Orders WHERE delivery_status = 'Delivered'; --Shows total amount and payment status for delivered orders

SELECT title, price FROM Books; -- Shows book titles and their prices.

SELECT book_id, AVG(rating) AS avg_rating FROM Reviews GROUP BY book_id; --Shows average rating for each book

SELECT COUNT(*) AS total_categories FROM Categories; --Shows total number of categories.

SELECT customer_id, COUNT(*) AS total_orders FROM Orders GROUP BY customer_id; --Shows number of orders placed by each customer.

SELECT Genre, count(Genre) as Quantity from Books GROUP BY(Genre); --Shows number of books in each genre.

SELECT customer_id, SUM(total_amount) AS total_spent FROM Orders GROUP BY customer_id ; --Shows total money spent by each customer.

ALTER TABLE Customers

ADD column preferred_genre VARCHAR(50); --Adds a new column preferred_genre to the Customers table.

UPDATE Customers SET preferred_genre = 'Fiction' WHERE customer_id = 1; --Sets each customer's preferred genre based on their ID.

```
UPDATE Customers SET preferred_genre = 'Self-help' WHERE customer_id = 2;
UPDATE Customers SET preferred_genre = 'Mystery' WHERE customer_id = 3;
UPDATE Customers SET preferred_genre = 'Drama' WHERE customer_id = 4;
UPDATE Customers SET preferred_genre = 'Romance' WHERE customer_id = 5;
UPDATE Customers SET preferred_genre = 'Science' WHERE customer_id = 6;
UPDATE Customers SET preferred_genre = 'Thriller' WHERE customer_id = 7;
UPDATE Customers SET preferred_genre = 'History' WHERE customer_id = 8;
UPDATE Customers SET preferred_genre = 'Classic' WHERE customer_id = 9;
UPDATE Customers SET preferred_genre = 'Poetry' WHERE customer_id = 10;
UPDATE Customers SET preferred_genre = 'Technology' WHERE customer_id = 11;
UPDATE Customers SET preferred_genre = 'Biography' WHERE customer_id = 12;
UPDATE Customers SET preferred_genre = 'Philosophy' WHERE customer_id = 13;
UPDATE Customers SET preferred_genre = 'Dystopian' WHERE customer_id = 14;
UPDATE Customers SET preferred_genre = 'Religion' WHERE customer_id = 15;
UPDATE Customers SET preferred_genre = 'Finance' WHERE customer_id = 16;
UPDATE Customers SET preferred_genre = 'Fiction' WHERE customer_id = 17;
UPDATE Customers SET preferred_genre = 'Romance' WHERE customer_id = 18;
SELECT Name, Address as District, registration_date, preferred_genre FROM Customers; --Shows
customers' name, district, registration date, and preferred genre
```

```
SELECT * FROM Customers WHERE customer_id IN (SELECT customer_id FROM Orders); --Shows
customers who have placed at least one order
```

```
SELECT book_id,title,Genre FROM Books WHERE book_id IN (SELECT book_id FROM Reviews); --Shows
details of books that have reviews
```

```
SELECT * FROM Books WHERE price < (SELECT AVG(price) FROM Books); --Shows books priced below the
average book price.
```

```
SELECT book_id, AVG(rating) AS avg_rating
```

FROM Reviews

GROUP BY book_id

ORDER BY avg_rating DESC

LIMIT 8; --Shows the top 8 highest-rated books.