**<Step 1: Create Tables**

CREATE TABLE customers (

id INT PRIMARY KEY AUTO\_INCREMENT,

name VARCHAR(100),

email VARCHAR(100),

city VARCHAR(50)

);

CREATE TABLE orders (

id INT PRIMARY KEY AUTO\_INCREMENT,

customer\_id INT,

product VARCHAR(100),

quantity INT,

price DECIMAL(10,2),

order\_date DATE,

FOREIGN KEY (customer\_id) REFERENCES customers(id)

);

**Step 2: Insert Data**

INSERT INTO customers (name, email, city) VALUES

('John Doe', 'john@example.com', 'New York'),

('Alice Smith', 'alice@example.com', 'Los Angeles'),

('Bob Johnson', 'bob@example.com', 'Chicago');

INSERT INTO orders (customer\_id, product, quantity, price, order\_date) VALUES

(1, 'Laptop', 1, 1000.00, '2024-02-01'),

(2, 'Phone', 2, 500.00, '2024-02-03'),

(3, 'Tablet', 1, 300.00, '2024-02-05');

**Step 3: Perform SQL Queries**

1. Select All Customers

SELECT \* FROM customers;

**2. Select Orders Where Price > 400**

SELECT \* FROM orders WHERE price > 400;

**3. Update Customer Email**

UPDATE customers SET email = 'newemail@example.com' WHERE id = 1;

**4. Delete an Order**

DELETE FROM orders WHERE id = 3;

**5. Select Orders with LIKE (Find Products Containing 'Phone')**

SELECT \* FROM orders WHERE product LIKE '%Phone%';

**6. Group Orders by Customer and Count Orders**

SELECT customer\_id, COUNT(\*) AS total\_orders

FROM orders GROUP BY customer\_id;

**7. Use HAVING to Show Customers with More Than 1 Order**

SELECT customer\_id, COUNT(\*) AS total\_orders

FROM orders GROUP BY customer\_id HAVING total\_orders > 1;

**8. Limit Results (Show Only 2 Customers)**

SELECT \* FROM customers LIMIT 2;

**9. Offset Results (Skip First Record, Show Next 2)**

SELECT \* FROM customers LIMIT 2 OFFSET 1;

**10. Subquery: Select Customers Who Placed Orders**

SELECT \* FROM customers WHERE id IN (SELECT customer\_id FROM orders);

**11. Use AND, OR, NOT**

SELECT \* FROM orders WHERE quantity > 1 AND price < 800;

SELECT \* FROM customers WHERE city = 'New York' OR city = 'Chicago';

SELECT \* FROM customers WHERE NOT city = 'Los Angeles';