**[SQLITE]**

• Create multiple tables and perform queries using: SELECT, UPDATE, DELETE, INSERT , WHERE, LIKE, GROUP BY, HAVING , LIMIT, OFFSET, Subqueries, AND, OR, NOT, IN \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

[ **Queries**]

Ans.

--------CREATE TABLE------

CREATE TABLE customers (

customer\_id INT PRIMARY KEY,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

email VARCHAR(100),

phone VARCHAR(20),

registration\_date DATE );

-- Create products table--

CREATE TABLE products (

product\_id INT PRIMARY KEY,

product\_name VARCHAR(100),

category VARCHAR(50),

price DECIMAL(10,2),

stock\_quantity INT

);

--------------INSERT---------

-- Insert data into customers

INSERT INTO customers VALUES

(1, 'John', 'Doe', 'john.doe@email.com', '555-1234', '2023-01-15'),

(2, 'Jane', 'Smith', 'jane.smith@email.com', '555-5678', '2023-02-20'),

(3, 'Robert', 'Johnson', 'robert.j@email.com', '555-9012', '2023-03-10'),

(4, 'Emily', 'Davis', 'emily.d@email.com', '555-3456', '2023-04-05');

-- Insert data into products

INSERT INTO products VALUES

(101, 'Laptop', 'Electronics', 999.99, 50),

(102, 'Smartphone', 'Electronics', 699.99, 100),

(103, 'Desk Chair', 'Furniture', 149.99, 30),

(104, 'Coffee Maker', 'Appliances', 79.99, 75),

(105, 'Headphones', 'Electronics', 129.99, 200);

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UPDATE

-- Update a customer's email address

UPDATE customers

SET email = 'john.doe.new@email.com'

WHERE customer\_id = 1;

-- Verify the update

SELECT customer\_id, first\_name, email FROM customers WHERE customer\_id = 1;

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DELETE

-- Delete a specific order

DELETE FROM orders

WHERE order\_id = 1006;

-- Verify deletion

SELECT \* FROM orders WHERE order\_id = 1006;

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-----------------SELECT-----------------

-- Select all columns from customers

SELECT \* FROM customers;

-- Select specific columns

SELECT first\_name, last\_name, email FROM customers;

---------WHERE, LIKE, GROUP BY, HAVING--------------

-----------------------------------------------------------------------

SELECT with WHERE clause

-- Find all electronics products

SELECT \* FROM products WHERE category = 'Electronics';

-- Find orders over $500

SELECT \* FROM orders WHERE total\_amount > 500;

-----------------------------------------------------------------------

SELECT with LIKE on products

-- Find customers with first names starting with 'J'

SELECT customer\_id, first\_name, last\_name

FROM customers

WHERE first\_name LIKE 'J%';

-----------------------------------------------------------------------

GROUP BY

-- Count products by category

SELECT

category,

COUNT(\*) AS product\_count

FROM products

GROUP BY category;

-----------------------------------------------------------------------

HAVING BY

-- Find product categories with more than 1 product

SELECT

category,

COUNT(\*) AS product\_count

FROM products

GROUP BY category

HAVING COUNT(\*) > 1;

---------LIMIT, OFFSET, Subqueries, AND, OR, NOT, IN------

SELECT with LIMIT on products

-- Get the 2 most expensive products

SELECT product\_name, price

FROM products

ORDER BY price DESC

LIMIT 2;

OFFSET

-- Get the second page of customers (rows 3-4)

SELECT customer\_id, first\_name, last\_name

FROM customers

ORDER BY customer\_id

LIMIT 2 OFFSET 2;

Subqueries

-- Find customers who placed orders

SELECT first\_name, last\_name, email

FROM customers

WHERE customer\_id IN (

SELECT DISTINCT customer\_id

FROM orders

);

AND

-- Find electronics products under $200

SELECT product\_id, product\_name, price

FROM products

WHERE category = 'Electronics' AND price < 200;

OR ,

-- Find products that are either Electronics or Appliances

SELECT product\_id, product\_name, category

FROM products

WHERE category = 'Electronics' OR category = 'Appliances';

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NOT

-- Find products that are NOT in the Electronics category

SELECT product\_id, product\_name, category

FROM products

WHERE NOT category = 'Electronics';

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IN

-- Find products in specific categories

SELECT product\_id, product\_name, category

FROM products

WHERE category IN ('Electronics', 'Furniture');