Elevate Labs SQL Developer Internship

Task 3 - Writing Basic SELECT Queries.

- **Domain: E-commerce :**

  - **SELECT from Table –**

-- 1. SELECT * : all customers

```
SELECT *
FROM customers;
```

-- 2. SELECT specific columns: product name, price, stock

```
SELECT product_id, name, price, stock_quantity
FROM products;
```

-- 3. SELECT * with a simple WHERE

```
SELECT *
FROM orders
WHERE status = 'Completed';
```

-- 4. WHERE + multiple conditions (AND / OR)

-- 4a. All orders completed by customers in a certain city

```
SELECT o.order_id, o.customer_id, o.order_date, o.total_amount
FROM orders o
JOIN customers c ON o.customer_id = c.customer_id
WHERE c.city = 'Pune'
  AND o.status = 'Completed';
```

```
-- 4b. Products either in one category or another
SELECT product_id, name, category, price
FROM products
WHERE category = 'Electronics'
   OR category = 'Accessories';

-- 5. WHERE + LIKE (pattern matching)
-- 5a. Products whose names start with “Smart”
SELECT product_id, name, price
FROM products
WHERE name LIKE 'Smart%';

-- 5b. Customers whose email domain is “gmail.com”
SELECT customer_id, name, email
FROM customers
WHERE email LIKE '%@gmail.com';

-- 6. WHERE + BETWEEN (for ranges)
-- 6a. Products priced between 1000 and 5000
SELECT product_id, name, price
FROM products
WHERE price BETWEEN 1000 AND 5000;

-- 6b. Orders placed between two dates
SELECT order_id, customer_id, order_date, total_amount
FROM orders
WHERE order_date BETWEEN '2024-01-01' AND '2024-06-30';

-- 7. Combining multiple filters: AND, OR, LIKE, BETWEEN
SELECT o.order_id, c.name AS customer_name, o.order_date, o.total_amount
FROM orders o
JOIN customers c ON o.customer_id = c.customer_id
```

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WHERE (c.city = 'Mumbai' OR c.city = 'Delhi')
  AND o.total_amount BETWEEN 2000 AND 10000
  AND c.name LIKE 'A%';

-- 8. SELECT from multiple tables (JOIN) + ORDER BY + LIMIT
-- Example: top 5 highest orders (amount) in 2024
SELECT o.order_id, o.customer_id, c.name AS customer_name, o.total_amount, o.order_date
FROM orders o
JOIN customers c ON o.customer_id = c.customer_id
WHERE o.order_date BETWEEN '2024-01-01' AND '2024-12-31'
ORDER BY o.total_amount DESC
LIMIT 5;

-- 9. More complex: order items and products
SELECT oi.order_item_id,
       oi.order_id,
       p.product_id,
       p.name       AS product_name,
       oi.quantity,
       oi.item_price
FROM order_items oi
JOIN products p ON oi.product_id = p.product_id
WHERE oi.quantity > 2
  AND p.category = 'Electronics'
ORDER BY oi.item_price DESC
LIMIT 10;

-- 10. Pagination: skip first N, then fetch M
-- Suppose we want orders in Pune, sorted by date descending, get rows 6 to 10
SELECT o.order_id, o.customer_id, o.order_date, o.total_amount
FROM orders o
```

```
JOIN customers c ON o.customer_id = c.customer_id
WHERE c.city = 'Pune'
ORDER BY o.order_date DESC
LIMIT 5 OFFSET 5;

-- 11. Using OR and combining other conditions
SELECT product_id, name, category, price, stock_quantity
FROM products
WHERE (category = 'Clothing' AND price < 2000)
   OR (category = 'Accessories' AND stock_quantity < 50)
ORDER BY category ASC, price DESC;
```