

## Lab 3

1. Count the total number of customers in the customers table.
  2. Find the average price of all products from the products table.
  3. Find the maximum quantity ordered from the order\_details table.
  4. Calculate the total price of all products in each category from the products table.
  5. Find the minimum price of products in the products table where category\_id is 1.
  6. Count how many customers are from each country.
  7. Count the number of orders placed per customer from the orders table.
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1. Retrieve all orders with the corresponding customer name and order date using the orders and customers tables.
  2. List all product names and their ordered quantities using the order\_details and products tables.
  3. Show all customers who have placed at least one order using the orders and customers tables.
  4. Retrieve all products and their category names, including products that don't belong to any category.
  5. List all customers and their order dates, including customers who haven't placed any orders.
  6. Show all order details with product names and customer names for orders placed in 2024.
  7. Find the total number of products each customer has ordered.
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1. Display all products with a column price\_level:
  - 'Cheap' if price < 50
  - 'Moderate' if price is between 50 and 100
  - 'Expensive' if price > 100
2. Show each customer's name with a column location\_type:
  - 'Egyptian' if country = 'Egypt'
  - 'Foreign' otherwise
3. Select all order details with a column quantity\_status:
  - 'Low' if quantity < 5

- 'Medium' if quantity is between 5 and 10
  - 'High' if quantity > 10
4. Add a column discount:
- 10% if price > 150
  - 5% if price is between 100–150
  - 0% otherwise
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1. List the top 3 most expensive products.
  2. List all products that do NOT belong to category IDs 1, 2, or 3.
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1. Select product names that start with 'C' and end with 'e'.
2. Select product names that contain "ch" anywhere.
3. Select customer names that contain repeated characters (e.g., double letters).
4. Select products whose names consist of exactly two words.
5. Select cities that start with a lowercase letter and end with an uppercase one.
6. Select product names that contain no numbers.
7. Select customer names that include a word of exactly 3 letters.
8. Select product names where the letter 'a' appears before 'e'.
9. Select customer names with three consecutive identical characters.
10. Select countries where the first and last letters are the same.
11. Select product names that contain vowels a, e, i, o, u in that exact order.
12. Select product names that have a capital letter in the middle only.
13. Select product names where a word is repeated.
14. Select customer names that start with A or B and end with N or M.
15. Select product names that contain a hyphen "-".
16. Select customer names that include a space within the first 3 characters.
17. Select product names that contain a word with more than 10 letters.

18. Select product names that contain no lowercase letters at all.
19. Select customer names that contain special characters like !, @, or #.
20. Select customer names where the first and last character are the same.