



Lab 4

SQL (Structured Query Language)

Objectives:

- Ability to write SQL queries.
- Using JOIN clause to combine rows from two or more tables.
- Using SQL aggregate functions to return a single value, calculated from values in a column.

Database:

The following relations shows basic entities of Order processing System.
Implement the schema using DDL statements:-

customer (customer_id, customer_name, city)

order (order_id, order_date, customer_id)

order_item (order_id, item_id, quantity)

item (item_id, unit_price)

shipment (order_id, warehouse_id, ship_date)

warehouse (warehouse_id, warehouse_city)

SQL Queries: please don't change the fields and tables naming

1. Write a SQL query to retrieve names of customers whose name starts with 'Ma'.
2. Write a SQL query to retrieve count of items and total price of each order.
3. Write a SQL query to retrieve order number for each order that have been shipped from warehouse in 'Avennes';

4. Write a SQL query to retrieve total price of orders that have been shipped from warehouse #3.
5. Write a **SQL** query to retrieve warehouse number and city for each warehouse and orders' numbers for orders that have been shipped from this warehouse even if there are no orders have been shipped from this warehouse.
6. Write a **SQL** query to retrieve customer name, count of orders for each customer even if the customer didn't make any orders.
7. Write a **SQL** query to retrieve all items that haven't been ordered.

Notes:

- A file contains DML scripts for data insertion will be uploaded to be able to test your SQL queries.
- Please write the names of tables and columns as mentioned above to ensure that DML scripts will run properly.

Policies:

- You should deliver DDL scripts for database creation and SQL scripts for the required queries.
- You should work individually.