LU04.A04 - SQL-DQL: Selects with Aggregate Functions

Requirements

- Work type: individual
- Timeframe: 20 Minutes
- Means of aid:
  - only teaching materials, no websearch, no use of ai.
  - W3Schools | SQL Editor
- Expected result: Semantically and syntactically correct SQL statements according to the requirements of the case studies.

Case studies / Assignments

The following ERD describes a order database for a a shop.

Assignments

The general assignment is to develop DQL commands that matches the requirements below:

Assignment a: MIN

We want to know which of our products is actually the most expensive.

```
SELECT max(price)
FROM Products;
```

Assignment b: MAX

What is the lowest price for the products of the supplier with id = 12?

```
SELECT max(price)
FROM Products
WHERE SupplierID = 12;
```

Assignment c: AVG

What is the average price for products of supplier 3?

```
SELECT AVG(price)
FROM Products
WHERE SupplierID = 3;
```

Assignment d: AVG

How many orders do we currently have in our data-base system from the customer with id = 5?

```
SELECT count(customerID)
FROM Orders
where customerID = 5;
```

Assignment e: SUM

What is the worth of the order 10255? Please note, that there are two tables involved in this select statement.

```
SELECT sum(price*quantity)
FROM OrderDetails, Products
WHERE orderDetails.OrderID = 10255
AND OrderDetails.ProductID = Products.ProductID;
```

Assignment f: GROUP BY

For our anual report we need list of the orders, and the value of each, grouped by the OrderID.

```
SELECT sum(price*quantity)
FROM OrderDetails, Products
WHERE orderDetails.OrderID = 10255
AND OrderDetails.ProductID = Products.ProductID;
```

Solution

Lösung

Vocabulary

English	German
…	…