

Assignment 1: SQL

All of the questions below refer to AdventureWorksLT2017 database (see below) that serves as the tutorial database for Microsoft's SQL Server and can be downloaded as part of its installation.

[Here](#) you can find the ERD schema of the database.

You should write a SQL statement that answers each of the following questions. Note which columns should be returned, and whether duplicate answers should be canceled. Submit a Word file solution containing all the answers. Check your answers. To help you, I have listed for each question as to how many answers should be returned according to the data.

You can install your own SQL Server + AdventureWorksLT database. For your convenience, I have created a SQL Server instance in the cloud that includes the AdventureWorksLT database. You can connect to this server using the SQL Server Management Studio (SSMS), which can be downloaded from [here](#), or any other database client (DBeaver, DataGrip, TablePlus etc).

In the SSMS login window, choose "SQL server authentication" and write:

Server name: 194.153.101.138

Login: student

Password: BigData2020

Questions:

1. Show the Company Name for James D. Kramer (1 row)
2. Show the Company Name for all customers located in a City whose name starts with D. (11 rows)
3. Show all companies that have a shipping address, with that address. Use the explicit join notation (10 rows).
4. Print the CompanyName of those customers with orders over \$50000 and the order amount, including the subtotal, tax and freight, from highest value to lowest (8 rows).
5. How many products in ProductCategory 'Cranksets' have been sold to an address (shipping or billing) in 'London' (1 row)?
6. Show pairs of products with the same list price, weight and color, w/o duplicates (2 rows).
7. How many items with ListPrice more than \$1000 have been sold, and what was their average price? (1 row)

8. Show the product categories (names) and the total weight of products in each category, if the product weight is not NULL (12 rows).
9. Show product model names and the number of products of each model, if there are at least 10 such products (8 rows).
10. Show the 5 best selling items AND their total selling price in ascending order in a column called Total (5 rows).
11. Show the names of product models that have products in both size XL and S (3 rows). Note the Size field may be called Sze.
12. Show the details of the product with the lowest list price (1 row).