**Objective:**

Learn aggregation using SQL operations: SELECT, WHERE, JOIN, GROUP BY, ORDER BY, etc.

**Theory:**

- https://www.postgresql.org/docs/current/queries.html
- https://habr.com/ru/post/480838/
- https://habr.com/ru/post/47031/ (for MySQL)
- https://www.postgresqltutorial.com/postgresql-views/

**Task:**

**Deadline:** 2-3 days

**Requirements**:

Implement list of functions to aggregate over domain:

- Get all products of selected brand
- Select all brands with the number of their products respectively. Order by the number of products.
- Get all products for a given category and section.
- Get all completed orders with a given product. Order from newest to latest.
- Get all reviews for a given product. Implement this as a view table which contains rating, comment and info of a person who left a comment.

As a result you should have a couple of sql files with the methods above.

**Answer all of these questions to be prepared:**

1. How does SELECT work in technical terms? What are the main query process steps?
2. What is the execution plan and how does it help to profile your queries?

3. What is the full table scan? How to detect and avoid full table scans?
4. How does JOIN work? What are the different types of JOIN command? What are the best practices when working with JOIN?
5. How does ordering and grouping work?
6. What is the view in SQL? What are the use cases to work with view instead of the actual table?