

What is SQL?

- SQL is Structured Query Language, used to communicate with databases and allow access to relational databases where data is stored in tables.
- These relational databases are made up of columns and rows, very similar to what we see in an Excel sheet.

What is SQL used for?

 SQL is used for manipulation and access to the data for analysis, providing deep insights to make business decisions easier.



Types of SQL commands

- DDL is (data definition language) commands used to create and modify database objects.
- DML is (data manipulation language) commands used to delete, add, update data in database
- DCL is (data control language) commands used to control access to any data in database
- DQL is (data query language) commands used to perform queries on the data in database



Filtering Grouped Data with HAVING Clause

 The HAVING clause is a command from the data control language used in a SELECT statement to filter groups of rows based on specific conditions. It is placed after the GROUP BY clause. Additionally, we can use aggregate functions such as COUNT(), SUM(), AVG(), etc. with it.



What is position of the HAVING Clause in a query?

- The following code block shows the position of the HAVING Clause
- SELECT
- FROM
- WHERE
- GROUP BY
- HAVING
- ORDER BY



Example of HAVING Clause

Table for Employee			
Employee ID	NAME	Salary	Department
1	Aya	50000	IT
2	Ahmed	60000	It
3	Khaled	70000	Sale
4	Sarah	45000	Sale
5	Mohamed	80000	Finance
6	Fagre	90000	finance

SELECT Department, SUM(Salary) as TotalSalary FROM employee GROUP BY Department HAVING SUM(Salary) >= 115000;

Output			
Department	TotalSalary		
Sale	115000		
Finance	170000		