

5.5

Using the HAVING Clause

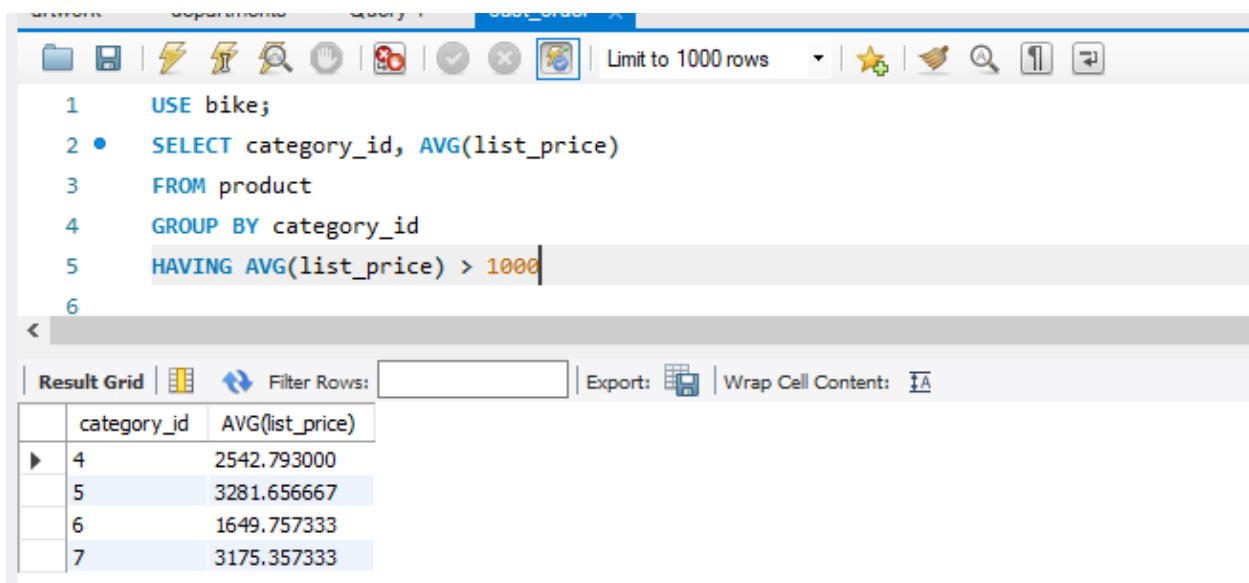
Filtering Aggregate Functions With The HAVING Clause

- The HAVING CLAUSE allows you to use an aggregate function as a filter. This is not allowed in a WHERE clause.
- Any columns or expressions you want to use in a HAVING clause, MUST BE DEFINED IN THE SELECT CLAUSE as well.

Code Sample:

```
USE bike;
SELECT category_id, AVG(list_price)
FROM product
GROUP BY category_id
HAVING AVG(list_price) > 1000
```

Output:



The screenshot shows a MySQL query editor window. The query text is as follows:

```
1 USE bike;
2 • SELECT category_id, AVG(list_price)
3 FROM product
4 GROUP BY category_id
5 HAVING AVG(list_price) > 1000
6
```

Below the query editor, the results are displayed in a table with the following data:

category_id	AVG(list_price)
4	2542.793000
5	3281.656667
6	1649.757333
7	3175.357333

We previously discussed the preceding lines of code for this query so we will focus solely on the HAVING clause.

HAVING AVG(list_price) > 1000

- The **HAVING** clause executes after the **GROUP BY** clause but before the **SELECT**
- If you use an aggregate function in the **HAVING** clause, you must include the same aggregate function in the **SELECT**
- If you reference a column or expression in the **HAVING** clause, you must include the same column or expression in the **SELECT**
- You cannot use aggregate functions in a **WHERE** clause



Miles, M. (2021). *Learning MySQL By Example*. EdTech Books.
https://edtechbooks.org/learning_mysql