

5.5

Using the HAVING Clause

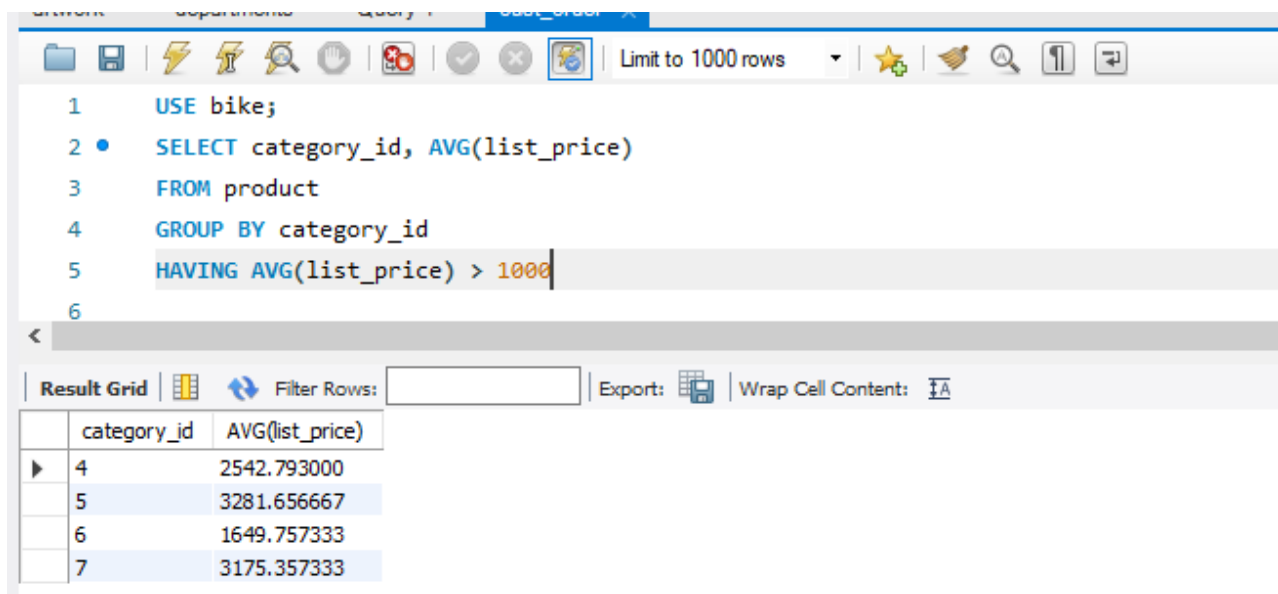
Filtering Aggregate Functions With The HAVING Clause

- 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 SQL IDE interface. The top toolbar includes icons for file operations, execution, and a 'Limit to 1000 rows' dropdown. The query editor displays the following SQL code:

```
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 'Result Grid' tab is active, showing a table with two columns: 'category_id' and 'AVG(list_price)'. The table contains four rows of 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



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