Why Do We Use HAVING with Aggregate Functions?

-In SQL, there's a key difference between WHERE and HAVING:

Clause	When is it used?	Can use aggregate functions?
WHERE	**Before** grouping	No
HAVING	**After** grouping	Yes

The Main Reason:

HAVING is used to filter grouped/aggregated results, while WHERE is used to filter individual rows before grouping.

Example:

Suppose you have an employees table with:

- department_id
- salary

```
SELECT department_id, SUM(salary) AS total_salary
FROM employees
GROUP BY department_id
HAVING SUM(salary) > 50000;
```

- GROUP BY groups employees by department.
- SUM(salary) calculates the total salary per department.
- HAVING filters those groups based on the result of the   aggregation.

Why Not Use WHERE Instead

```
SELECT department_id, SUM(salary)
FROM employees
WHERE SUM(salary) > 50000
GROUP BY department_id;
```

This will give an error because SUM(salary) is **not known** in the WHERE clause — aggregation hasn't happened yet.

At Least :

Purpose	Use
Filter rows before grouping	WHERE
Filter grouped results	HAVING