SQL HAVING clause

Having Clause

SQL HAVING clause specifies a search condition for a group or an aggregate. HAVING is usually used in a GROUP BY clause, but even if you are not using GROUP BY clause, you can use HAVING to function like a WHERE clause. You must use HAVING with SQL SELECT.

Syntax:

SELECT <column_list> FROM < table name >
WHERE <search_condition]>
GROUP BY <columns>
[HAVING] <search_condition]>
[ORDER BY {order_expression [ASC | DESC]}[, ...]];

Parameters:

Name	Description
table_name	Name of the table.
column_list	Name of the columns of the table.
columns	Name of the columns which will participate in grouping.

How a HAVING clause works IN SQL?

- The select clause specifies the columns.
- The from clause supplies a set of potential rows for the result.
- The where clause gives a filter for these potential rows.
- The group by clause divide the rows in a table into smaller groups.
- The having clause gives a filter for these group rows.

SQL HAVING clause

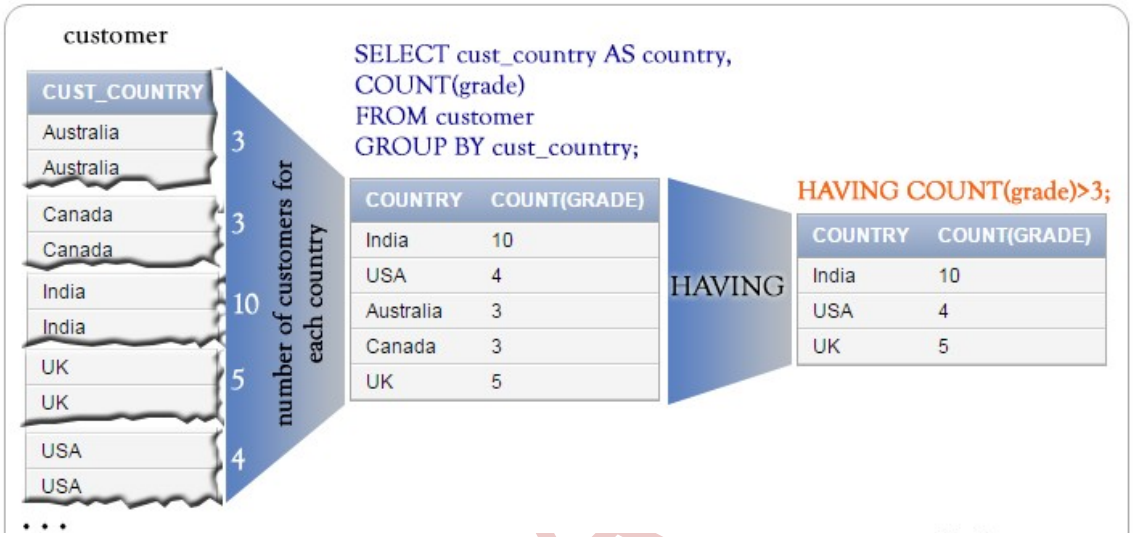
Display cust_country and number of customers for the same grade for each cust_country, with the following condition -
1. number of customer for a same 'grade' must be more than 2,

```
SELECT cust_country,COUNT(grade)
FROM customer
GROUP BY cust_country
HAVING COUNT(grade)>2;
```

Sample Output:

CUST_COUNTRY	COUNT(GRADE)
USA	4
India	10
Australia	3
Canada	3
UK	5

Pictorial presentation:



SQL HAVING using where

In the following example, the SQL WHERE clause along with the HAVING clause have used to make a select statement.

Example:

Find the list of cust_city, sum of opening_amt, average of receive_amt and maximum payment_amt from customer table with following conditions-

1. grade of customer table must be 2,

2. average of receive_amt for each group of cust_city must be more than 500,

```
SELECT cust_city,SUM(opening_amt),
AVG(receive_amt),MAX(payment_amt)
FROM customer
WHERE grade=2
GROUP BY cust_city
HAVING AVG(receive_amt)>500;
```

SQL HAVING with order by

In the following example, the SQL WHERE clause along with the HAVING clause is used to make a query. An ORDER BY clause arranges the final result in the specific order. The default order is ascending.

Find the list of cust_city, sum of opening_amt, average of receive_amt and maximum payment_amt from customer table with following conditions-
1. grade of customer table must be 2,
2. average of receive_amt for each group of cust_city must be more than 500,
3. the output should be arranged in the ascending order of SUM(opening_amt),

```
SELECT cust_city,SUM(opening_amt),
AVG(receive_amt),MAX(payment_amt)
FROM customer
WHERE grade=2
GROUP BY cust_city
HAVING AVG(receive_amt)>500
ORDER BY SUM(opening_amt);
```