HAVING vs ORDER BY vs GROUP BY

**HAVING** – The HAVING clause was instrumented into SQL because the WHERE clause could not appropriately aggregate functions. The HAVING acts as a filter and is commonly used with the GROUP BY clause as well as the ORDER BY clause.

**GROUP BY** – The GROUP BY clause is used to sort the query by the specific column(s) chosen.

**ORDER BY** – The ORDER BY clause is used to summarize unique combinations of the values of chosen columns.

ORDER BY EXAMPLE:

SELECT SalesOrderID,

       ProductID,

       OrderQty\* UnitPrice As ExtendedPrice

FROM   Sales.SalesOrderDetail

ORDER BY SalesOrderID

* Here is an example of the ORDER BY clause sorting the SalesOrderID

GROUP BY EXAMPLE:

SELECT SalesOrderID,

       SUM(OrderQty\* UnitPrice) As TotalPrice

FROM   Sales.SalesOrderDetail

GROUP BY SalesOrderID

* Here is an example of the GROUP BY clause grouping the SalesOrderID column

HAVING CLAUSE EXAMPLE:

SELECT COUNT(CustomerID), Country  
FROM Customers  
GROUP BY Country  
HAVING COUNT(CustomerID) > 5  
ORDER BY COUNT(CustomerID) DESC;

* Here is an example where the HAVING clause filters out customer ID’s with a count greater than 5.