AGGREGATE FUNCTIONS IN SQL

SQL Series Part 6

-Mayuri Dandekar

WHAT IS FUNCTIONS?

Functions in SQL are the database objects that contains a **set of SQL statements** to perform a specific task. A function **accepts input parameters**, **perform actions**, **and then return the result**.

Types of Function:

- 1. System Defined Function: these are built-in functions
 - Example: rand(), round(), upper(), lower(), count(), sum(), avg(), max(), etc
- 2. **User-Defined Function**: Once you define a function, you can call it in the same way as the built-in functions

AGGREGATE FUNCTIONS

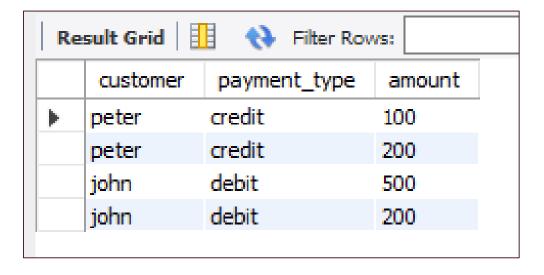
Aggregate function performs a calculation on multiple values and returns a single value.

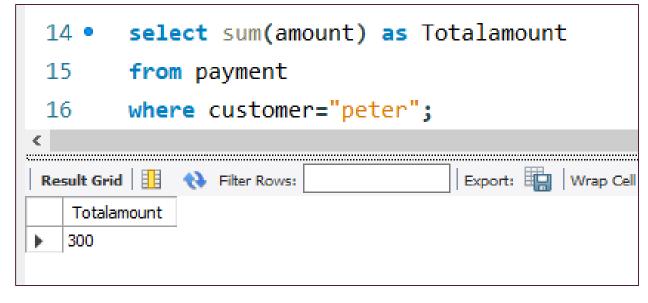
Aggregate functions are often used with GROUP BY & SELECT statement

- COUNT() returns number of values
- SUM() returns sum of all values
- AVG() returns average value
- MAX() returns maximum value
- MIN() returns minimum value
- ROUND() Rounds a number to a specified number of decimal places

AGGREGATE FUNCTION -- SUM

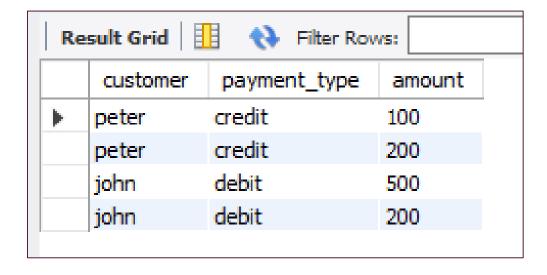
Sum function sum the value of all the rows in the group. If the group by clause is omitted then it sums all the rows.

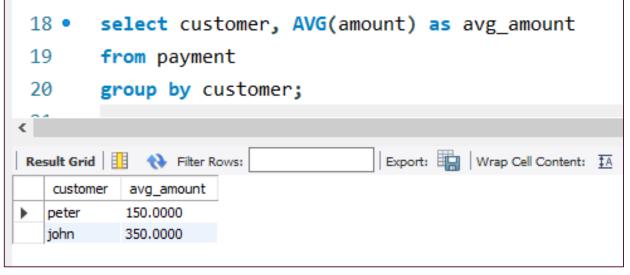




AGGREGATE FUNCTION -- AVG

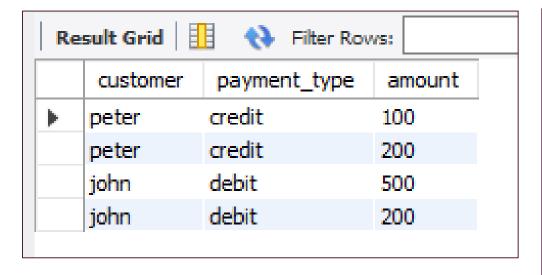
The aggregate function AVG() returns the average of a given expression, usually numeric values in a column.

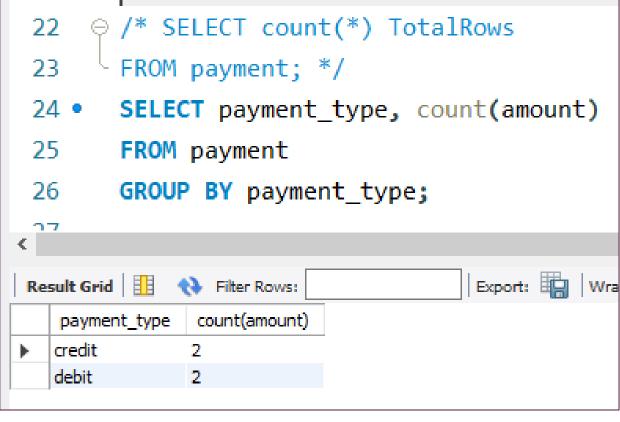




AGGREGATE FUNCTION -- COUNT

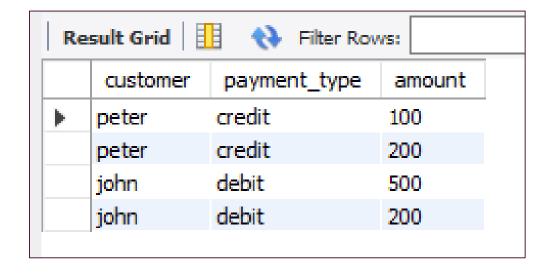
You can count the number of rows or count as per the given expression

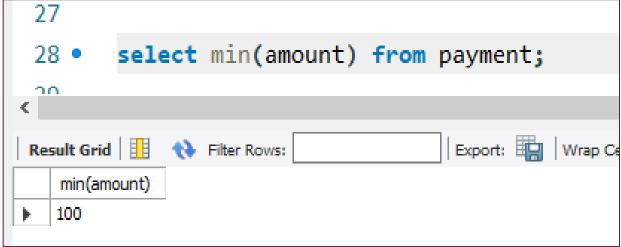




AGGREGATE FUNCTION -- MIN

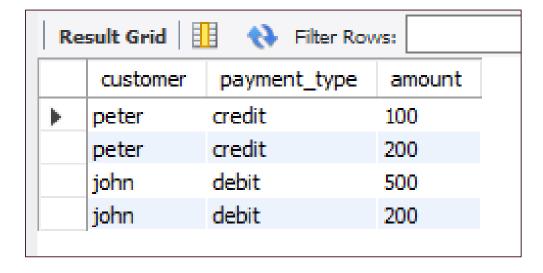
Find the **smallest value** of column

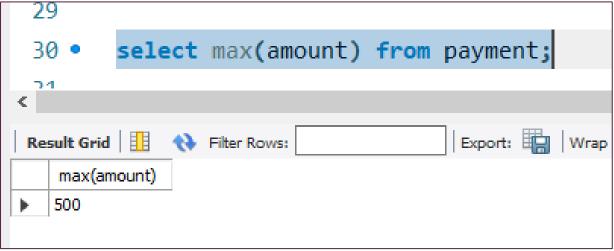




AGGREGATE FUNCTION -- MAX

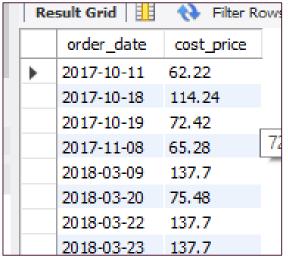
Find the **largest value** of column

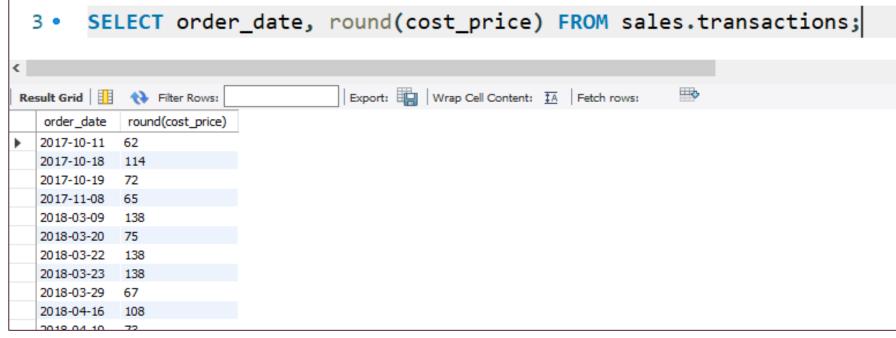




AGGREGATE FUNCTION -- ROUND

Rounds a number to specific number of a decimal place.





THANK YOU!!!

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