

SQL Cheat Sheet: FUNCTIONS and Implicit JOIN



**Skills
Network**

Command	Syntax	Description	Example
COUNT	<code>SELECT COUNT(column_name) FROM table_name WHERE condition;</code>	COUNT function returns the number of rows that matches a specified criterion.	<code>SELECT COUNT(dep_id) FROM employees;</code>
AVG	<code>SELECT AVG(column_name) FROM table_name WHERE condition;</code>	AVG function returns the average value of a numeric column.	<code>SELECT AVG(salary) FROM employees;</code>
SUM	<code>SELECT SUM(column_name) FROM table_name WHERE condition;</code>	SUM function returns the total sum of a numeric column.	<code>SELECT SUM(salary) FROM employees;</code>
MIN	<code>SELECT MIN(column_name) FROM table_name WHERE condition;</code>	MIN function returns the smallest value of the SELECTed column.	<code>SELECT MIN(salary) FROM employees;</code>
MAX	<code>SELECT MAX(column_name) FROM table_name WHERE condition;</code>	MAX function returns the largest value of the SELECTed column.	<code>SELECT MAX(salary) FROM employees;</code>
ROUND	<code>SELECT ROUND(2number, decimals, operation) AS RoundValue;</code>	ROUND function rounds a number to a specified number of decimal places.	<code>SELECT ROUND(salary) FROM employees;</code>
LENGTH	<code>SELECT LENGTH(column_name) FROM table;</code>	LENGTH function returns the length of a string (in bytes).	<code>SELECT LENGTH(f_name) FROM employees;</code>
UCASE	<code>SELECT UCASE(column_name) FROM table;</code>	UCASE function that displays the column name in each table in uppercase.	<code>SELECT UCASE(f_name) FROM employees;</code>
DISTINCT	<code>SELECT DISTINCT(column_name) FROM table;</code>	DISTINCT function is used to display data without duplicates.	<code>SELECT DISTINCT(UCASE(f_name)) FROM employees;</code>
DAY	<code>SELECT DAY(column_name) FROM table</code>	DAY function returns the day of the month for a given date	<code>SELECT DAY(b_date) FROM employees where emp_id = 'E1002';</code>
CURRENT DATE	<code>SELECT (CURRENT DATE - COLUMN) FROM table;</code>	CURRENT DATE is used to display the current date. This can be subtracted from the previous date to get the difference.	<code>SELECT YEAR(CURRENT DATE - b_date) As AGE, CURRENT_DATE, b_date FROM employees;</code>
Subquery	<code>SELECT column_name [, column_name] FROM table1 [, table2] WHERE column_name OPERATOR (SELECT column_name [, column_name] FROM table1 [, table2] [WHERE])</code>	<p>Subquery is a query within another SQL query and embedded within the WHERE clause.</p> <p>A subquery is used to return data that will be used in the main query as a condition to further restrict the data to be retrieved.</p>	<code>SELECT emp_id, fname, lname, salary FROM employees where salary < (SELECT AVG(salary) FROM employees);</code> <code>SELECT * FROM (SELECT emp_id, f_name, l_name, dep_id FROM employees) AS emp4all;</code> <code>SELECT * FROM employees WHERE job_id IN (SELECT job_id FROM jobs);</code>

Implicit Inner Join	<pre>SELECT column_name(s) FROM table1, table2 WHERE table1.column_name = table2.column_name;</pre>	Implicit Inner Join combines the two or more records but displays only matching values in both tables. Inner join applies only the specified columns.	<pre>SELECT * FROM employees, jobs where employees.job_id = jobs.job_id;</pre>
Implicit Cross Join	<pre>SELECT column_name(s) FROM table1, table2;</pre>	Implicit Cross Join defines as a Cartesian product where the number of rows in the first table multiplied by the number of rows in the second table..	<pre>SELECT * FROM employees, jobs;</pre>

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Changelog

Date	Version	Changed by	Change Description
2021-07-28	1.0	Lakshmi Holla	Initial Version