SQL Cheat Sheet: Intermediate - LIKE, ORDER BY, GROUP BY, FUNCTIONS, Implicit JOIN



Command	Syntax	Description	Example
LIKE	SELECT column1, column2, FROM table_name WHERE columnN LIKE pattern;	LIKE operator is used in a WHERE clause to search for a specified pattern in a column. There are two wildcards often used in conjunction with the LIKE operator which are percent sign(%) and underscore sign (_).	SELECT f_name , l_name FROM employees WHERE address LIKE '%Elgin,IL%';
BETWEEN	<pre>SELECT column_name(s) FROM table_name WHERE column_name BETWEEN value1 AND value2;</pre>	The BETWEEN operator selects values within a given range. The values can be numbers, text, or dates. The BETWEEN operator is inclusive: begin and end values are included.	SELECT * FROM employees WHERE salary BETWEEN 40000 AND 80000;
ORDER BY	<pre>SELECT column1, column2, FROM table_name ORDER BY column1, column2, ASC DESC;</pre>	ORDER BY keyword is used to sort the result- set in ascending or descending order. The default is ascending.	SELECT f_name, l_name, dep_id FROM employees ORDER BY dep_id DESC, l_name;
GROUP BY	<pre>SELECT column_name(s) FROM table_name WHERE condition GROUP BY column_name(s) ORDER BY column_name(s);</pre>	GROUP BY clause is used in collaboration with the SELECT statement to arrange identical data into groups.	<pre>SELECT dep_id, COUNT(*) FROM employees GROUP BY dep_id;</pre>
COUNT	<pre>SELECT COUNT(column_name) FROM table_name WHERE condition;</pre>	COUNT function returns the number of rows that matches a specified criterion.	<pre>SELECT COUNT(dep_id) FROM employees;</pre>
AVG	<pre>SELECT AVG(column_name) FROM table_name WHERE condition;</pre>	AVG function returns the average value of a numeric column.	SELECT AVG(salary) FROM employees;
SUM	<pre>SELECT SUM(column_name) FROM table_name WHERE condition;</pre>	SUM function returns the total sum of a numeric column.	SELECT SUM(salary) FROM employees;
MIN	<pre>SELECT MIN(column_name) FROM table_name WHERE condition;</pre>	MIN function returns the smallest value of the SELECTed column.	SELECT MIN(salary) FROM employees;
MAX	<pre>SELECT MAX(column_name) FROM table_name WHERE condition;</pre>	MAX function returns the largest value of the SELECTed column.	SELECT MAX(salary) FROM employees;
ROUND	SELECT ROUND(2number, decimals, operation) AS RoundValue;	ROUND function rounds a number to a specified number of decimal places.	SELECT ROUND(salary) FROM employees;
LENGTH	SELECT LENGTH(column_name) FROM table;	LENGTH function returns the length of a string (in bytes).	<pre>SELECT LENGTH(f_name) FROM employees;</pre>
UCASE	SELECT UCASE(column_name) FROM table;	UCASE function that displays the column name in each table in uppercase.	<pre>SELECT UCASE(f_name) FROM employees;</pre>
DISTINCT	<pre>SELECT DISTINCT(column_name) FROM table;</pre>	DISTINCT function is used to display data without duplicates.	<pre>SELECT DISTINCT(UCASE(f_name)) FROM employees;</pre>
DAY	SELECT DAY(column_name) FROM table	DAY function returns the day of the month for a given date	<pre>SELECT DAY(b_date) FROM employees where emp_id = 'E1002';</pre>
CURRENT DATE	SELECT (CURRENT DATE - COLUMN) FROM table;	CURRENT DATE is used to display the current date. This can be subtracted from the previous date to get the difference.	<pre>SELECT YEAR(CURRENT DATE - b_date) As AGE, CURRENT_DATE, b_date FROM employees;</pre>
Subquery	SELECT column_name [, column_name] FROM table1 [, table2] WHERE column_name OPERATOR (SELECT column_name [, column_name] FROM table1 [, table2] [WHERE])	Subquery is a query within another SQL query and embedded within the WHERE clause. 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.	<pre>SELECT emp_id, fmame, lname, salary FROM employees where salary < (SELECT AVG(salary) FROM employees); SELECT * FROM (SELECT emp_id, f_name, l_name, dep_id FROM employees) AS emp4all;</pre>
			<pre>SELECT * FROM employees WHERE job_id II (SELECT job_ident FROM jobs);</pre>
mplicit 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_ident;</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	SELECT * FROM employees, jobs;

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Changelog

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