SQL Cheat Sheet: JOIN statements

Joins

Topic	Syntax	Description	Example
Cross Join	`SELECT column_name(s) FROM table1 CROSS JOIN table2;`	The `CROSS JOIN` is used to generate a paired combination of each row of the first table with each row of the second table.	`SELECT DEPT_ID_DEP, LOCT_ID FROM DEPARTMENTS CROSS JOIN LOCATIONS;`
Inner Join	`SELECT column_name(s) FROM table1 INNER JOIN table2 ON table1.column_name = table2.column_name; WHERE condition;`	You can use an `inner join` in a SELECT statement to retrieve only the rows that satisfy the join conditions on every specified table.	`select E.F_NAME,E.L_NAME, JH.START_DATE from EMPLOYEES as E INNER JOIN JOB_HISTORY as JH on E.EMP_ID=JH.EMPL_ID where E.DEP_ID ='5';`
Left Outer Join	`SELECT column_name(s) FROM table1 LEFT OUTER JOIN table2 ON table1.column_name = table2.column_name WHERE condition;`	The `LEFT OUTER JOIN` will return all records from the left side table and the matching records from the right table.	`select E.EMP_ID,E.L_NAME,E.DEP_ID,D.DEP_NAME from EMPLOYEES AS E LEFT OUTER JOIN DEPARTMENTS AS D ON E.DEP_ID=D.DEPT_ID_DEP;`
Right Outer Join	`SELECT column_name(s) FROM table1 RIGHT OUTER JOIN table2 ON table1.column_name = table2.column_name WHERE condition;`	The `RIGHT OUTER JOIN` returns all records from the right table, and the matching records from the left table.	`select E.EMP_ID,E.L_NAME,E.DEP_ID,D.DEP_NAME from EMPLOYEES AS E RIGHT OUTER JOIN DEPARTMENTS AS D ON E.DEP_ID=D.DEPT_ID_DEP;`
Full Outer Join	`SELECT column_name(s) FROM table1 FULL OUTER JOIN table2 ON table1.column_name = table2.column_name WHERE condition;`	The `FULL OUTER JOIN` clause results in the inclusion of rows from two tables. If a value is missing when rows are joined, that value is null in the result table.	`select E.F_NAME,E.L_NAME,D.DEP_NAME from EMPLOYEES AS E FULL OUTER JOIN DEPARTMENTS AS D ON E.DEP_ID=D.DEPT_ID_DEP;`
Self Join	`SELECT column_name(s) FROM table1 T1, table1 T2 WHERE condition;`	A `self join` is regular join but it can be used to joined with itself.	`SELECT B.* FROM EMPLOYEES A JOIN EMPLOYEES B ON A.MANAGER_ID = B.MANAGER_ID WHERE A.EMP_ID = 'E1001';`

Joins in MySQL using phpMyAdmin

	`SELECT column_name(s) FROM table1 LEFT OUTER JOIN table2 ON table1.column_name = table2.column_name WHERE condition`
	`UNION`
	`SELECT column_name(s)`
	`FROM table1`
	`RIGHT OUTER JOIN table2`
	`ON table1.column_name = table2.column_name`
	`WHERE condition`
			`select E.F_NAME,E.L_NAME,D.DEP_NAME from EMPLOYEES AS E LEFT OUTER JOIN DEPARTMENTS AS D ON E.DEP_ID=D.DEPT_ID_DEP`
			`UNION`
			`select E.F_NAME,E.L_NAME,D.DEP_NAME`
			`from EMPLOYEES AS E`
			`RIGHT OUTER JOIN DEPARTMENTS AS D ON E.DEP_ID=D.DEPT_ID_DEP`

Full Outer Join		The `UNION operator` is used to combine the result-set of two or more SELECT statements.	

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Changelog

Date	Version	Changed by	Change Description
2023-05-04	1.1	Benny Li	Formatting changes
2023-10-04	1.0	D.M.Naidu	Initial Version