

SQL Cheat Sheet: JOIN statements



Skills
Network

Joins

Topic	Syntax	Description	Example
Cross Join	<code>SELECT column_name(s) FROM table1 CROSS JOIN table2;</code>	The CROSS JOIN is used to generate a paired combination of each row of the first table with each row of the second table.	<code>SELECT DEPT_ID_DEP, LOCT_ID FROM DEPARTMENTS CROSS JOIN LOCATIONS;</code>
Inner Join	<code>SELECT column_name(s) FROM table1 INNER JOIN table2 ON table1.column_name = table2.column_name; WHERE condition;</code>	You can use an inner join in a SELECT statement to retrieve only the rows that satisfy the join conditions on every specified table.	<code>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';</code>
Left Outer Join	<code>SELECT column_name(s) FROM table1 LEFT OUTER JOIN table2 ON table1.column_name = table2.column_name WHERE condition;</code>	The LEFT OUTER JOIN will return all records from the left side table and the matching records from the right table.	<code>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;</code>
Right Outer Join	<code>SELECT column_name(s) FROM table1 RIGHT OUTER JOIN table2 ON table1.column_name = table2.column_name WHERE condition;</code>	The RIGHT OUTER JOIN returns all records from the right table, and the matching records from the left table.	<code>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;</code>
Full Outer Join	<code>SELECT column_name(s) FROM table1 FULL OUTER JOIN table2 ON table1.column_name = table2.column_name WHERE condition;</code>	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.	<code>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;</code>
Self Join	<code>SELECT column_name(s) FROM table1 T1, table1 T2 WHERE condition;</code>	A self join is regular join but it can be used to joined with itself.	<code>SELECT B.* FROM EMPLOYEES A JOIN EMPLOYEES B ON A.MANAGER_ID = B.MANAGER_ID WHERE A.EMP_ID = 'E1001';</code>

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

Full Outer Join

```
SELECT column_name(s)  
FROM table1  
RIGHT OUTER JOIN table2  
ON table1.column_name = table2.column_name  
WHERE condition
```

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

```
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
```

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Changelog

Date	Version	Changed by	Change Description
2023-05-04	1.1	Benny Li	Formatting changes
2022-10-04	1.0	D.M.Naidu	Initial Version