



Description	Diagram	Syntax																																										
<p>An inner join matches each row of one table with rows of a second table based on a common column. The resulting table will only contain rows where there is a match in both the left and right tables.</p>	<div><div><table><caption>table1</caption><tr><th>col A</th><th>col B</th></tr><tr><td>a</td><td>x</td></tr><tr><td>b</td><td>y</td></tr><tr><td>c</td><td>z</td></tr></table></div><div><div>=</div><div><table><caption>table2</caption><tr><th>col B</th><th>col C</th></tr><tr><td>x</td><td>d</td></tr><tr><td>w</td><td>e</td></tr><tr><td>z</td><td>f</td></tr></table></div></div><div><div>=</div><div><table><caption>INNER JOIN</caption><tr><th>col A</th><th>col B</th><th>col C</th></tr><tr><td>a</td><td>x</td><td>d</td></tr><tr><td>c</td><td>z</td><td>f</td></tr></table></div></div></div>	col A	col B	a	x	b	y	c	z	col B	col C	x	d	w	e	z	f	col A	col B	col C	a	x	d	c	z	f	<pre>SELECT * FROM table1 JOIN table2 ON table1.id = table2.table1_id</pre>																	
col A	col B																																											
a	x																																											
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col A	col B	col C																																										
a	x	d																																										
c	z	f																																										
<p>A left join matches each row of one table with rows of a second table based on a common column. The resulting table will only contain all data from the first (left) table, and additional data from the second (right) table for where the</p>	<div><div><table><caption>table1</caption><tr><th>col A</th><th>col B</th></tr><tr><td>a</td><td>x</td></tr><tr><td>b</td><td>y</td></tr><tr><td>c</td><td>z</td></tr></table></div><div><div>=</div><div><table><caption>table2</caption><tr><th>col B</th><th>col C</th></tr><tr><td>x</td><td>d</td></tr><tr><td>w</td><td>e</td></tr><tr><td>z</td><td>f</td></tr></table></div></div><div><div>=</div><div><table><caption>LEFT JOIN</caption><tr><th>col A</th><th>col B</th><th>col C</th></tr><tr><td>a</td><td>x</td><td>d</td></tr><tr><td>b</td><td>y</td><td></td></tr><tr><td>c</td><td>z</td><td>f</td></tr></table></div></div></div>	col A	col B	a	x	b	y	c	z	col B	col C	x	d	w	e	z	f	col A	col B	col C	a	x	d	b	y		c	z	f	<pre>SELECT * FROM table1 LEFT JOIN table2 ON table1.id = table2.table1_id</pre>														
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<p>A cross join combines all rows of one table with all rows of another table.</p>	<div><div><table><caption>table1</caption><tr><th>col A</th><th>col B</th></tr><tr><td>a</td><td>c</td></tr><tr><td>b</td><td>d</td></tr></table></div><div><div></div><div><table><caption>table2</caption><tr><th>col C</th><th>col D</th></tr><tr><td>e</td><td>h</td></tr><tr><td>f</td><td>i</td></tr><tr><td>g</td><td>j</td></tr></table></div></div><div><div></div><div><table><caption>CROSS JOIN</caption><tr><th>col A</th><th>col B</th><th>col C</th><th>col D</th></tr><tr><td>a</td><td>c</td><td>e</td><td>h</td></tr><tr><td>b</td><td>d</td><td>e</td><td>h</td></tr><tr><td>a</td><td>c</td><td>f</td><td>i</td></tr><tr><td>b</td><td>d</td><td>f</td><td>i</td></tr><tr><td>a</td><td>c</td><td>g</td><td>j</td></tr><tr><td>b</td><td>d</td><td>g</td><td>j</td></tr></table></div></div></div>	col A	col B	a	c	b	d	col C	col D	e	h	f	i	g	j	col A	col B	col C	col D	a	c	e	h	b	d	e	h	a	c	f	i	b	d	f	i	a	c	g	j	b	d	g	j	<pre>SELECT table1.col1, table2.col2 FROM table1 CROSS JOIN table2;</pre>
col A	col B																																											
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a	c	g	j																																									
b	d	g	j																																									
<p>The command union allows us to stack one dataset on top of the other.</p>	<div><div><table><caption>table1</caption><tr><th>col A</th><th>col B</th></tr><tr><td>a</td><td>c</td></tr><tr><td>b</td><td>d</td></tr></table></div><div><div></div><div><table><caption>table2</caption><tr><th>col C</th><th>col D</th></tr><tr><td>e</td><td></td></tr><tr><td>f</td><td></td></tr><tr><td>g</td><td></td></tr></table></div></div><div><div></div><div><table><caption>UNION</caption><tr><th>col A</th><th>col B</th></tr><tr><td>a</td><td>c</td></tr><tr><td>b</td><td>d</td></tr><tr><td>e</td><td>h</td></tr><tr><td>f</td><td>i</td></tr><tr><td>g</td><td>j</td></tr></table></div></div></div>	col A	col B	a	c	b	d	col C	col D	e		f		g		col A	col B	a	c	b	d	e	h	f	i	g	j	<pre>SELECT * FROM table1 UNION SELECT * FROM table2;</pre>																
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