SQL JOIN Types Cheat Sheet

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1. INNER JOIN:
   -- Returns only the rows with matching values in both tables.
   SELECT columns
   FROM table1
   INNER JOIN table2 ON table1.common_column = table2.
   common_column;
2. LEFT JOIN (or LEFT OUTER JOIN):
   -- Returns all rows from the left table, and the matched rows
   from the right table.
   -- If no match, NULL values are returned for columns from the
   right table.
   SELECT columns
   FROM table1
  LEFT JOIN table2 ON table1.common_column = table2.
   common_column;
3. RIGHT JOIN (or RIGHT OUTER JOIN):
   -- Returns all rows from the right table, and the matched rows
    from the left table.
   -- If no match, NULL values are returned for columns from the
   left table.
   SELECT columns
   FROM table1
   RIGHT JOIN table2 ON table1.common_column = table2.
   common_column;
4. FULL OUTER JOIN:
   -- Returns all rows when there is a match in either left or
   right table.
   -- If there is no match, NULL values are returned for the
   columns of the table without a match.
   SELECT columns
   FROM table1
   FULL OUTER JOIN table2 ON table1.common_column = table2.
   common_column;
5. CROSS JOIN:
   -- Returns the Cartesian product of the two tables, meaning
   all possible combinations of rows.
   SELECT columns
   FROM table1
   CROSS JOIN table2;
```

6. SELF JOIN:

-- A table is joined with itself to combine rows based on a related column.

 ${\tt SELECT\ a.columns,\ b.columns}$

FROM table_name a, table_name b

WHERE a.common_column = b.common_column;

7. JOIN with USING:

 $\mbox{--}$ Simplifies syntax when the column names are the same in both tables.

SELECT columns

FROM table1

JOIN table2 USING (common_column);