Different Type of JOINS

Types of Joins

- INNER join.
- OUTER join.
- LEFT OUTER join.
- RIGHT OUTER join.
- CROSS join.
- FULL join.

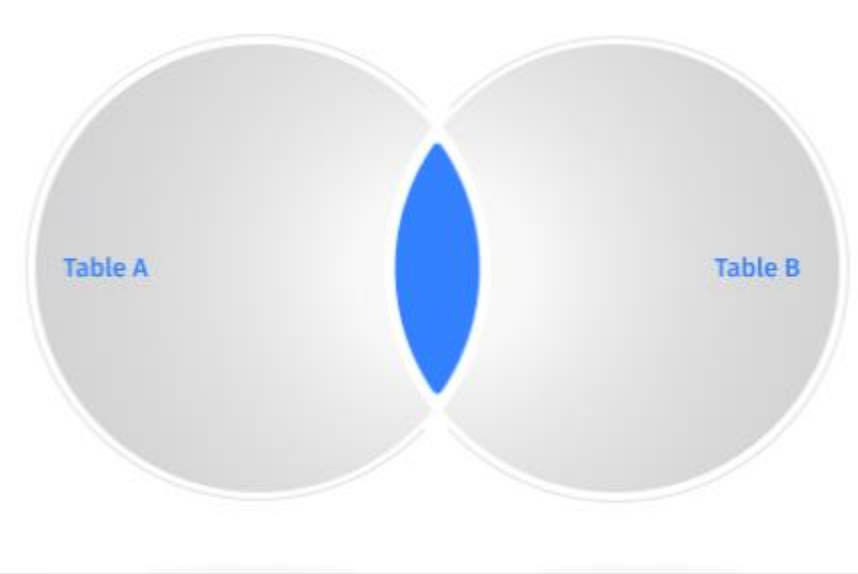
INNER Join

- **INNER JOINs** are used to fetch only common matching records. The INNER JOIN clause allows retrieving only those records from Table A and Table B, that meet the join condition. It is the most widely used type of JOIN.
- SELECT columns

  FROM tableA

  INNER JOIN tableB

  ON tableA.column = tableB.column;



OUTER Join

- In contrast to INNER JOINs, **OUTER JOINs** return not only matching rows but non-matching ones as well. In case there are non-matching rows in a joined table, the NULL values will be shown for them.

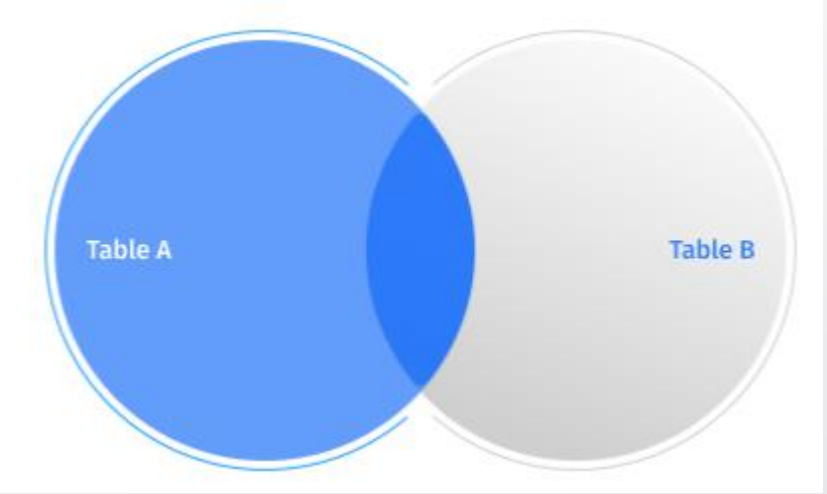
LEFT OUTER Join

- **LEFT JOINs** allow retrieving all records from Table A, along with those records from Table B for which the join condition is met. For the records from Table A that do not match the condition, the NULL values are displayed.
- SELECT columns

  FROM tableA

  LEFT [OUTER] JOIN tableB

  ON tableA.column = tableB.column;



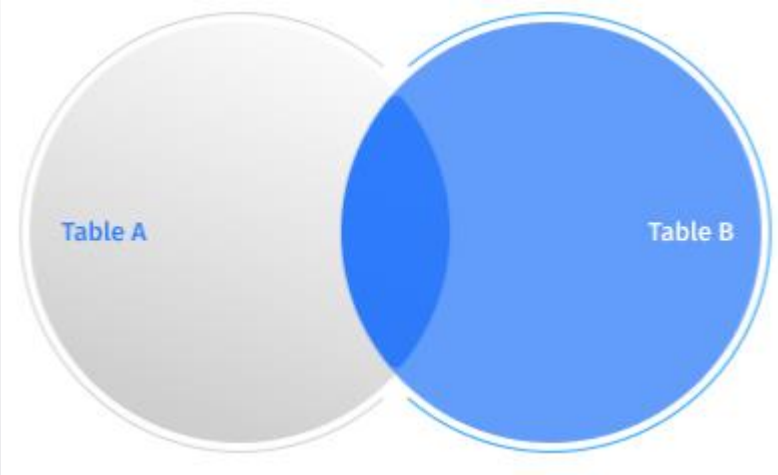
RIGHT OUTER Join

- Accordingly, RIGHT JOINs allow retrieving all records from Table B, along with those records from Table A for which the join condition is met. For the records from Table B that do not match the condition, the NULL values are displayed.
- SELECT columns

  FROM tableA

  RIGHT [OUTER] JOIN tableB

  ON tableA.column = tableB.column;

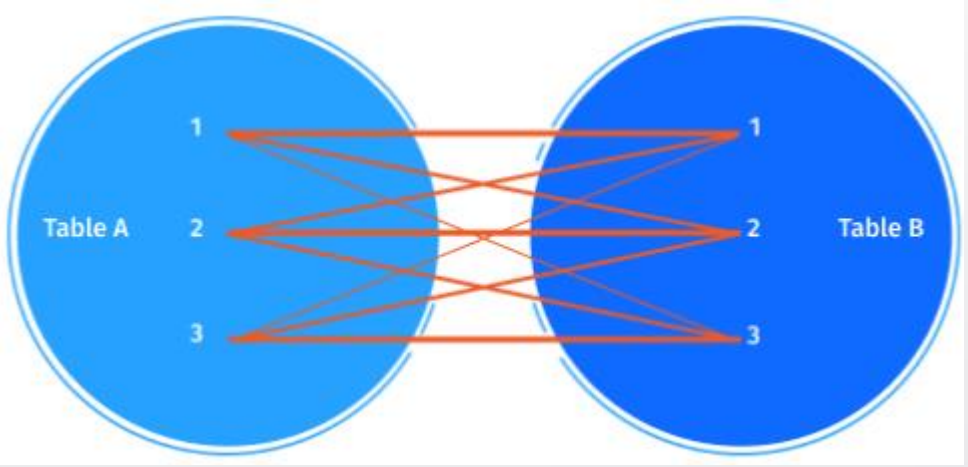


CROSS Join

- MySQL CROSS JOIN, also known as a cartesian join, retrieves all combinations of rows from each table. In this type of JOIN, the result set is returned by multiplying each row of table A with all rows in table B if no additional condition is introduced.
- When you might need that type of JOIN? Envision that you have to find all combinations of a product and a color. In that case, a CROSS JOIN would be highly advantageous.
- SELECT columns

  FROM tableA

  CROSS JOIN tableB



MySQL Joins guidelines

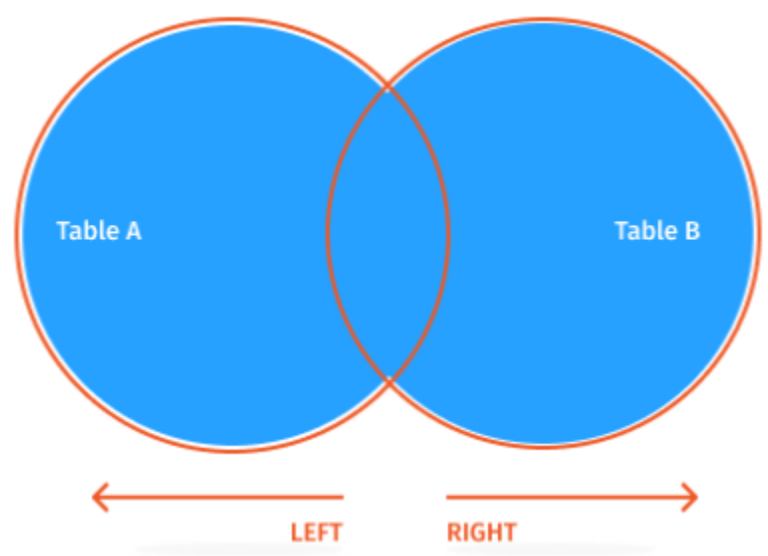
- JOINs in MySQL allow you to use a single JOIN query instead of running multiple simple queries. Thus, you can achieve better performance, reduce server overhead, and decrease the number of data transfers between MySQL and your application.
- Unlike SQL Server, MySQL does not support FULL OUTER JOIN as a separate JOIN type. However, to get the results same to FULL OUTER JOIN, you can combine LEFT OUTER JOIN and RIGHT OUTER JOIN.
- SELECT * FROM tableA

  LEFT JOIN tableB ON tableA.id = tableB.id

  UNION

  SELECT * FROM tableA

  RIGHT JOIN tableB ON tableA.id = tableB.id



MySQL Joins for Multiple tables

- SELECT *

  FROM tableA

  LEFT JOIN tableB

  ON tableA.id = tableB.id

  LEFT JOIN tableC

  ON tableC.id = tableA.id;