1. INNER JOIN

Returns records that have matching values in both tables.

Example:

SELECT a.id, a.name, b.order_id

FROM customers a

INNER JOIN orders b ON a.id = b.customer_id;

2. LEFT JOIN (or LEFT OUTER JOIN)

Returns all records from the left table and the matched records from the right table. If there's no match, NULL values are returned for columns from the right table.

Example:

SELECT a.id, a.name, b.order_id

FROM customers a

LEFT JOIN orders b ON a.id = b.customer_id;

3. RIGHT JOIN (or RIGHT OUTER JOIN)

Returns all records from the right table and the matched records from the left table. If there's no match, NULL values are returned for columns from the left table.

Example:

SELECT a.id, a.name, b.order_id

FROM customers a

RIGHT JOIN orders b ON a.id = b.customer_id;

4. FULL JOIN (or FULL OUTER JOIN)

Returns all records when there is a match in either left or right table records. If there's no match, NULL values are returned for columns from both tables.

Example:

SELECT a.id, a.name, b.order_id

FROM customers a

FULL OUTER JOIN orders b ON a.id = b.customer_id;

5. CROSS JOIN

Returns the Cartesian product of two tables. That is, it returns all possible combinations of rows from the tables.

Example:

SELECT a.id, a.name, b.order_id FROM customers a

CROSS JOIN orders b;