Join Type	Main Feature	Example
CROSS JOIN	Combine each row in t1 with each row in t2 Include all possible combinations t1 CROSS JOIN t2	SELECT department_name, first_name, last_name FROM departments CROSS JOIN employees;
INNER JOIN	Combine rows based on matching information (typically t1.primarykey = t2.foreignkey) t1 JOIN T2 ON (t1.primarykey = t2.foreignkey) t1 INNER JOIN T2 ON (t1.primarykey = t2.foreignkey)	SELECT department_name, first_name, last_name FROM departments d JOIN employees e ON (d.department_number = e.department_number);
EQUI JOIN	Join based on matching condition t1 JOIN T2 ON (t1.column1 = t2.column2)	SELECT customer_id, customer_last_name, employee_id, last_name FROM customers c JOIN employees e ON (c.customer_first_name = e.first_name);
NON-EQUI JOIN	Join based on non-matching condition: <> != t1 JOIN t2 ON (t1.column1 <> t2.column2)	SELECT customer_id, customer_last_name, employee_id, last_name FROM customers c JOIN employees e ON (c.customer_first_name <> e.first_name);
SELF JOIN	Join a table with itself t1 t1alias1 JOIN t1 t1alias2 on (join condition) Need to join two different rows in the same table	SELECT c1.customer_id, c2.customer_id FROM customers c1 JOIN customers c2 ON (c1.customer_state = c2.customer_state) AND (c1.customer_id <> c2.customer_id);
OUTER JOIN	Need to return extra data in one or two tables --extra data in t1 t1 Left JOIN t2 ON (t1.primarykey = t2.foreignkey) --extra data in t2 t1 Right JOIN t2 ON (t1.primarykey = t2.foreignkey) --extra data in t1 or t2 t1 FULL JOIN t2 ON (t1.primarykey = t2.foreignkey)	SELECT department_name, first_name, last_name FROM departments d LEFT JOIN employees e ON (d.department_number = e.department_number); SELECT department_name, first_name, last_name FROM departments d RIGHT JOIN employees e ON (d.department_number = e.department_number);

		SELECT department_name, first_name, last_name FROM departments d FULL JOIN employees e ON (d.department_number = e.department_number);
NATURAL JOIN	Join tables based on ALL columns with same names T1 NATURAL JOIN T2;	SELECT department_name, first_name, last_name FROM departments NATURAL JOIN employees;

Join Syntax Format	**Main Feature**	**Example**
JOIN ON	Combine rows in two tables based on explicit join conditions t1 JOIN t2 ON (join condition)	SELECT department_name, first_name, last_name FROM departments d JOIN employees e ON (d.department_number = e.department_number);
JOIN USING	Combine rows in two tables based on explicitly listed columns with same names t1 JOIN t2 USING (common_column1, common_column2, …)	SELECT department_name, first_name, last_name FROM departments JOIN employees USING (department_number);
IMPLICIT JOIN	Combine rows in two tables without JOIN keyword & use WHERE clause to include join conditions FROM t1, t2 WHERE join_conditions	--inner join SELECT department_name, first_name, last_name FROM departments d, employees e WHERE d.department_number = e.department_number; --left outer join SELECT department_name, first_name, last_name FROM departments d, employees e WHERE d.department_number = e.department_number(+); --right outer join SELECT department_name, first_name, last_name FROM departments d, employees e WHERE d.department_number(+) = e.department_number;