INNER JOIN

Returns only the rows where there is a match in both tables.

SELECT employees.employee_id, employees.name, departments.department_name

FROM employees

INNER JOIN departments ON employees.department_id = departments.department_id;

LEFT OUTER JOIN

Returns all rows from the left table (employees), and the matched rows from the right table (departments). The result is NULL on the side of the right table when there is no match.

SELECT employees.employee_id, employees.name, departments.department_name

FROM employees

LEFT OUTER JOIN departments ON employees.department_id = departments.department_id;

RIGHT OUTER JOIN

Returns all rows from the right table (departments), and the matched rows from the left table (employees). The result is NULL on the side of the left table when there is no match.

SELECT employees.employee_id, employees.name, departments.department_name

FROM employees

RIGHT OUTER JOIN departments ON employees.department_id = departments.department_id;

FULL OUTER JOIN

Returns all rows when there is a match in one of the tables. The result is NULL on the side where there is no match.

SELECT employees.employee_id, employees.name, departments.department_name

FROM employees

FULL OUTER JOIN departments ON employees.department_id = departments.department_id;

Find Duplicate records

1) Based on firstName

2) based on email

3) Based on firstname and Last Name

4) Based on firstname and email

1) SELECT first_name, COUNT(*)

FROM employees

GROUP BY first_name

HAVING COUNT(*) > 1;

OUTPUT:

First_name | count(*)

John | 2

2) SELECT email, COUNT(*)

FROM employees

GROUP BY email

HAVING COUNT(*) > 1;

OUTPUT:

Email | count(*)

John.doe@example.com | 2

3) SELECT first_name, last_name, COUNT(*)

FROM employees

GROUP BY first_name, last_name

HAVING COUNT(*) > 1;

OUTPUT:

First_name | last_name | count(*)

John | Doe | 2

4) SELECT first_name, email, COUNT(*)

FROM employees

GROUP BY first_name, email

HAVING COUNT(*) > 1;

OUTPUT:

First_name | email | count(*)

John | john.doe@example.com | 2