DESCRIPTION

Table: Employee

+---------------+---------+

| Column Name | Type |

+---------------+---------+

| employee_id | int |

| department_id | int |

| primary_flag | varchar |

+---------------+---------+

(employee_id, department_id) is the primary key (combination of columns with unique values) for this table.

employee_id is the id of the employee.

department_id is the id of the department to which the employee belongs.

primary_flag is an ENUM (category) of type ('Y', 'N'). If the flag is 'Y', the department is the primary department for the employee. If the flag is 'N', the department is not the primary.

Employees can belong to multiple departments. When the employee joins other departments, they need to decide which department is their primary department. Note that when an employee belongs to only one department, their primary column is 'N'.

Write a solution to report all the employees with their primary department. For employees who belong to one department, report their only department.

Return the result table in **any order**.

The result format is in the following example.

Example 1:

Input:

Employee table:

+-------------+---------------+--------------+

| employee_id | department_id | primary_flag |

+-------------+---------------+--------------+

| 1 | 1 | N |

| 2 | 1 | Y |

| 2 | 2 | N |

| 3 | 3 | N |

| 4 | 2 | N |

| 4 | 3 | Y |

| 4 | 4 | N |

+-------------+---------------+-------------+

Output:

+-------------+---------------+

| employee_id | department_id |

+-------------+---------------+

| 1 | 1 |

| 2 | 1 |

| 3 | 3 |

| 4 | 3 |

+-------------+---------------+

Explanation:

- The Primary department for employee 1 is 1.

- The Primary department for employee 2 is 1.

- The Primary department for employee 3 is 3.

- The Primary department for employee 4 is 3.

SOLUTION

MySQL:

- Select the desired columns from 'Employee' table where 'primary_flag' is 'Y', and grouping by 'employee_id'
- Select the desired columns from 'Employee' table grouping by 'employee_id' and having COUNT(employee_id) = 1
- UNION is used to combine the result-set of two

```sql
SELECT employee_id, department_id
FROM Employee
WHERE primary_flag = 'Y'
GROUP BY employee_id
UNION
SELECT employee_id, department_id
FROM Employee
GROUP BY employee_id
HAVING COUNT(employee_id) = 1;
```

PostgreSQL:

- Select the desired columns from ‘Employee’ table using WHERE with two conditions
- Condition 1 - ‘primary_flag’ is ‘Y’
- Condition 2 - ‘employee_id’ IN a subquery which selects ‘employee_id’ grouped by ‘employee_id’ and having COUNT(employee_id) = 1

```sql
SELECT employee_id, department_id
FROM Employee
WHERE primary_flag = 'Y' OR employee_id IN(SELECT employee_id
FROM Employee
GROUP BY 1
HAVING COUNT(employee_id) = 1);
```