PostgreSQL FULL OUTER JOIN

Query Editor Query History Explain Messages

```
1  --First, create two new tables for the demonstration: employees and departments:
2
3  DROP TABLE IF EXISTS departments;
4  DROP TABLE IF EXISTS employees;
5
6  CREATE TABLE departments (
7      department_id serial PRIMARY KEY,
8      department_name VARCHAR (255) NOT NULL
9  );
10
11 CREATE TABLE employees (
12     employee_id serial PRIMARY KEY,
13     employee_name VARCHAR (255),
14     department_id INTEGER
15 );
```

Data Output

dvdrental/postgres@PostgreSQL

Query Editor Query History Explain Messages

```
1  --insert some sample data into the departments and employees tables.
2
3  INSERT INTO departments (department_name)
4  VALUES
5      ('Sales'),
6      ('Marketing'),
7      ('HR'),
8      ('IT'),
9      ('Production');
10
11 INSERT INTO employees (
12     employee_name,
13     department_id
14 )
15 VALUES
16     ('Bette Nicholson', 1),
17     ('Christian Gable', 1),
18     ('Joe Swank', 2),
19     ('Fred Costner', 3),
20     ('Sandra Kilmer', 4),
21     ('Julia Mcqueen', NULL);
```

Data Output

dvdrental/postgres@PostgreSQL

Query Editor Query History Explain Messages

```
1  --Third, query data from the departments and employees tables:
2
3  SELECT * FROM departments;
```

Data Output

department_id [PK] integer	department_name character varying (255)

dvdrental/postgres@PostgreSQL

Query Editor Query History Explain Messages

```
1  --Third, query data from the departments and employees tables:
2
3  SELECT * FROM employees;
```

Data Output

employee_id [PK] integer	employee_name character varying (255)	department_id integer

Query Editor | Query History | Explain | Messages

```
--Fourth, use the FULL OUTER JOIN to query data from both employees and departments tables.

SELECT
    employee_name,
    department_name
FROM
    employees e
FULL OUTER JOIN departments d
        ON d.department_id = e.department_id;
```

Data Output

employee_name character varying (255)	department_name character varying (255)

Query Editor | Query History | Explain | Messages

```
--To find the department that does not have any employees, you use a WHERE clause as follows:

SELECT
    employee_name,
    department_name
FROM
    employees e
FULL OUTER JOIN departments d
        ON d.department_id = e.department_id
WHERE
    employee_name IS NULL;
```

Data Output

employee_name character varying (255)	department_name character varying (255)