PostgreSQL Joins

dvdrental/postgres@PostgreSQL

Query Editor | Query History | Explain | Messages

```
1  --the first table (basket_a) with the second table (basket_b) by matching the values in the fruit_a and fruit_b colur
2  SELECT
3      a,
4      fruit_a,
5      b,
6      fruit_b
7  FROM
8      basket_a
9  INNER JOIN basket_b
10     ON fruit_a = fruit_b;
```

Data Output

	a integer	fruit_a character varying (100)	b integer	fruit_b character varying (100)
1	1	Apple	2	Apple
2	2	Orange	1	Orange

Query Editor | Query History | Explain | Messages

```
1  --the left join clause to join the basket_a table with the basket_b table
2  SELECT
3      a,
4      fruit_a,
5      b,
6      fruit_b
7  FROM
8      basket_a
9  LEFT JOIN basket_b
10     ON fruit_a = fruit_b;
```

Data Output

	a integer	fruit_a character varying (100)	b integer	fruit_b character varying (100)
1	1	Apple	2	Apple
2	2	Orange	1	Orange
3	3	Banana	[null]	[null]
4	4	Cucumber	[null]	[null]

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Query Editor | Query History | Explain | Messages

```
1  --To select rows from the left table that do not have matching rows in the right table, you use the left join with a WHERE clause.
2  SELECT
3      a,
4      fruit_a,
5      b,
6      fruit_b
7  FROM
8      basket_a
9  LEFT JOIN basket_b
10     ON fruit_a = fruit_b
11 WHERE b IS NULL;
```

Data Output

	a integer	fruit_a character varying (100)	b integer	fruit_b character varying (100)
1	3	Banana	[null]	[null]
2	4	Cucumber	[null]	[null]

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Query Editor | Query History | Explain | Messages

```sql
--The following statement uses the right join to join the basket_a table with the basket_b table
SELECT
    a,
    fruit_a,
    b,
    fruit_b
FROM
    basket_a
RIGHT JOIN basket_b ON fruit_a = fruit_b;
```

Data Output

	a integer	fruit_a character varying (100)	b integer	fruit_b character varying (100)
1	2	Orange	1	Orange
2	1	Apple	2	Apple
3	[null]	[null]	3	Watermelon
4	[null]	[null]	4	Pear

Query Editor | Query History | Explain | Messages

```sql
--you can get rows from the right table that do not have matching rows from the left table by adding a WHERE clause as follows:
SELECT
    a,
    fruit_a,
    b,
    fruit_b
FROM
    basket_a
RIGHT JOIN basket_b
   ON fruit_a = fruit_b
WHERE a IS NULL;
```

Data Output

	a integer	fruit_a character varying (100)	b integer	fruit_b character varying (100)
1	[null]	[null]	3	Watermelon
2	[null]	[null]	4	Pear

Query Editor | Query History | Explain | Messages

```sql
--The full outer join or full join returns a result set that contains all rows from both left and right tables
--with the matching rows from both sides if available.
SELECT
    a,
    fruit_a,
    b,
    fruit_b
FROM
    basket_a
FULL OUTER JOIN basket_b
    ON fruit_a = fruit_b;
```

Data Output

	a integer	fruit_a character varying (100)	b integer	fruit_b character varying (100)
1	1	Apple	2	Apple
2	2	Orange	1	Orange
3	3	Banana	[null]	[null]
4	4	Cucumber	[null]	[null]
5	[null]	[null]	3	Watermelon
6	[null]	[null]	4	Pear

```sql
--To return rows in a table that do not have matching rows in the other, you use the full join with a WH
SELECT
    a,
    fruit_a,
    b,
    fruit_b
FROM
    basket_a
FULL JOIN basket_b
   ON fruit_a = fruit_b
WHERE a IS NULL OR b IS NULL;
```

Data Output

	a integer	fruit_a character varying (100)	b integer	fruit_b character varying (100)
1	3	Banana	[null]	[null]
2	4	Cucumber	[null]	[null]
3	[null]	[null]	3	Watermelon
4	[null]	[null]	4	Pear