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The difference between LEFT JOIN and RIGHT JOIN is simply in the data that they show. In the ON part of the query, it uses two columns within each table being joined and compares the values to see if there are equivalent values between the two columns. However, there is a possibility that an element in the column of the “left table” doesn’t have a match for an element in the column of the “right table.” The query will show this unmatched value if the query is using a LEFT JOIN. If the query uses a RIGHT JOIN, it will not show the value, as the value is in the left table. Take this example from the CAP3 Database. Note that there is a customer, c005 who has yet to place an order, thus there is no value for c005 in orders.cid.

The image displays two side-by-side screenshots of a PostgreSQL SQL Editor window, illustrating the difference between LEFT JOIN and RIGHT JOIN queries.

Left Screenshot (LEFT JOIN):

- SQL Editor:** Contains the query:

```
SELECT *  
FROM orders  
LEFT JOIN customers  
ON orders.cid = customers.cid;
```
- Output pane:** Shows 14 rows of data. The columns are: `mon`, `cid`, `aid`, `pid`, `qty`, `totalusd`, `cid`, `name`, `city`, and `discount`. The data includes orders from January to May, with customers like Tiptop, Tyrell, Allied, ACME, and Weyland.

Right Screenshot (RIGHT JOIN):

- SQL Editor:** Contains the query:

```
SELECT *  
FROM orders  
RIGHT JOIN customers  
ON orders.cid = customers.cid;
```
- Output pane:** Shows 15 rows of data. The columns are the same as the left screenshot. The data includes all orders from the left screenshot, plus an additional row (row 15) for customer c005 (Weyland, Acheron) with a discount of 0.00, which was not present in the LEFT JOIN result.

The left query is a LEFT JOIN, where orders is the left table and customers is the right table. The right query is a RIGHT JOIN where orders is the left table and customers is the right table. In the highlighted row of the right query, you can see that there is data showing a customer with c005. This row is not there in the left query. This is due to the fact that this value only exists in customers, or the right table. Since it only appears in the right table, it only appears in the RIGHT JOIN and does not show in the LEFT JOIN.