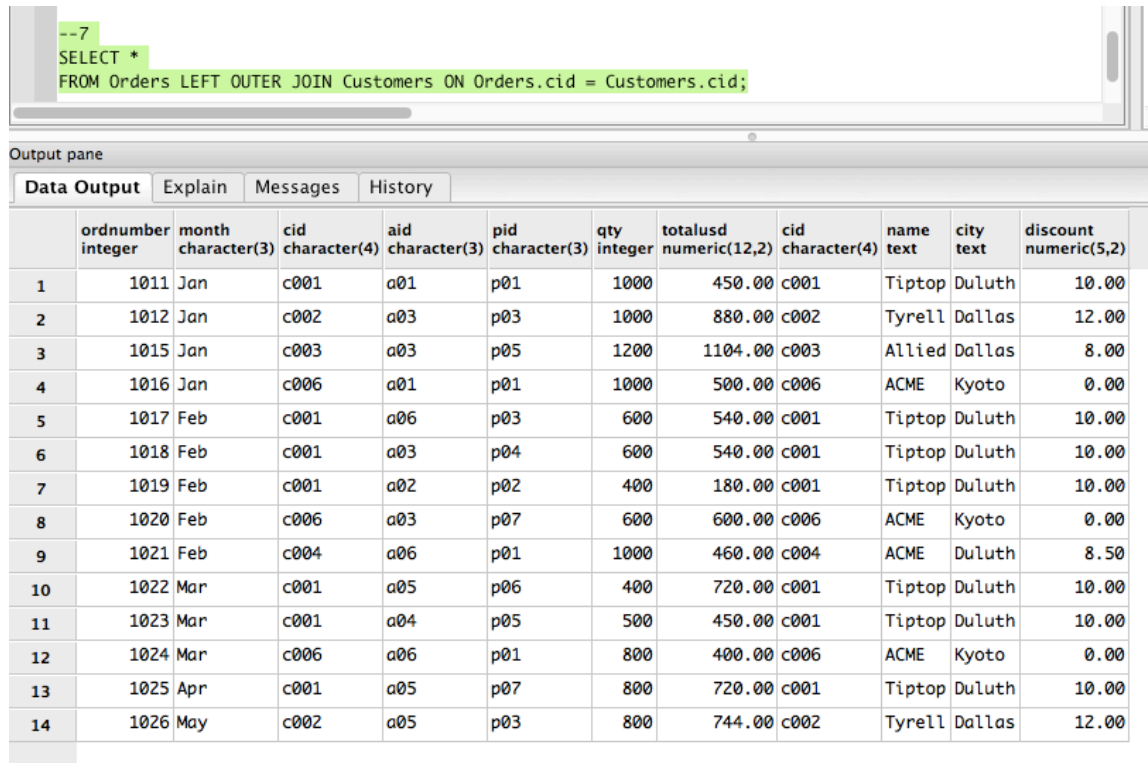


The difference between LEFT OUTER JOIN and RIGHT OUTER JOIN is the order in which the tables are looked at. In a LEFT OUTER JOIN Postgres looks at all the rows from the first table in the query first, and joins them with the second table in the query. In a RIGHT OUTER JOIN Postgres first looks at the second table in the join statement, then joins the first table in the query. While this is a small difference it can yield very different results. An example using the CAP4 database is when you join the Orders table with the Customers table. Below are screenshots of the JOINS and their results.



```
--7
SELECT *
FROM Orders LEFT OUTER JOIN Customers ON Orders.cid = Customers.cid;
```

Output pane

	ordnumber integer	month character(3)	cid character(4)	aid character(3)	pid character(3)	qty integer	totalusd numeric(12,2)	cid character(4)	name text	city text	discount numeric(5,2)
1	1011	Jan	c001	a01	p01	1000	450.00	c001	Tiptop	Duluth	10.00
2	1012	Jan	c002	a03	p03	1000	880.00	c002	Tyrell	Dallas	12.00
3	1015	Jan	c003	a03	p05	1200	1104.00	c003	Allied	Dallas	8.00
4	1016	Jan	c006	a01	p01	1000	500.00	c006	ACME	Kyoto	0.00
5	1017	Feb	c001	a06	p03	600	540.00	c001	Tiptop	Duluth	10.00
6	1018	Feb	c001	a03	p04	600	540.00	c001	Tiptop	Duluth	10.00
7	1019	Feb	c001	a02	p02	400	180.00	c001	Tiptop	Duluth	10.00
8	1020	Feb	c006	a03	p07	600	600.00	c006	ACME	Kyoto	0.00
9	1021	Feb	c004	a06	p01	1000	460.00	c004	ACME	Duluth	8.50
10	1022	Mar	c001	a05	p06	400	720.00	c001	Tiptop	Duluth	10.00
11	1023	Mar	c001	a04	p05	500	450.00	c001	Tiptop	Duluth	10.00
12	1024	Mar	c006	a06	p01	800	400.00	c006	ACME	Kyoto	0.00
13	1025	Apr	c001	a05	p07	800	720.00	c001	Tiptop	Duluth	10.00
14	1026	May	c002	a05	p03	800	744.00	c002	Tyrell	Dallas	12.00

```
--7
SELECT *
FROM Orders RIGHT OUTER JOIN Customers ON Orders.cid = Customers.cid;
```

Output pane

Data Output		Explain	Messages	History							
	ordnumber integer	month character(3)	cid character(4)	aid character(3)	pid character(3)	qty integer	totalusd numeric(12,2)	cid character(4)	name text	city text	discount numeric(5,2)
1	1011	Jan	c001	a01	p01	1000	450.00	c001	Tiptop	Duluth	10.00
2	1012	Jan	c002	a03	p03	1000	880.00	c002	Tyrell	Dallas	12.00
3	1015	Jan	c003	a03	p05	1200	1104.00	c003	Allied	Dallas	8.00
4	1016	Jan	c006	a01	p01	1000	500.00	c006	ACME	Kyoto	0.00
5	1017	Feb	c001	a06	p03	600	540.00	c001	Tiptop	Duluth	10.00
6	1018	Feb	c001	a03	p04	600	540.00	c001	Tiptop	Duluth	10.00
7	1019	Feb	c001	a02	p02	400	180.00	c001	Tiptop	Duluth	10.00
8	1020	Feb	c006	a03	p07	600	600.00	c006	ACME	Kyoto	0.00
9	1021	Feb	c004	a06	p01	1000	460.00	c004	ACME	Duluth	8.50
10	1022	Mar	c001	a05	p06	400	720.00	c001	Tiptop	Duluth	10.00
11	1023	Mar	c001	a04	p05	500	450.00	c001	Tiptop	Duluth	10.00
12	1024	Mar	c006	a06	p01	800	400.00	c006	ACME	Kyoto	0.00
13	1025	Apr	c001	a05	p07	800	720.00	c001	Tiptop	Duluth	10.00
14	1026	May	c002	a05	p03	800	744.00	c002	Tyrell	Dallas	12.00
15								c005	Weyland	Risa	0.00

As you can see, the right outer join includes Customer c005, even though that customer has never purchased anything. This is because this join is looking at the Customers table first and displaying this table, then joining it with the orders table.