PostgreSQL Exercises

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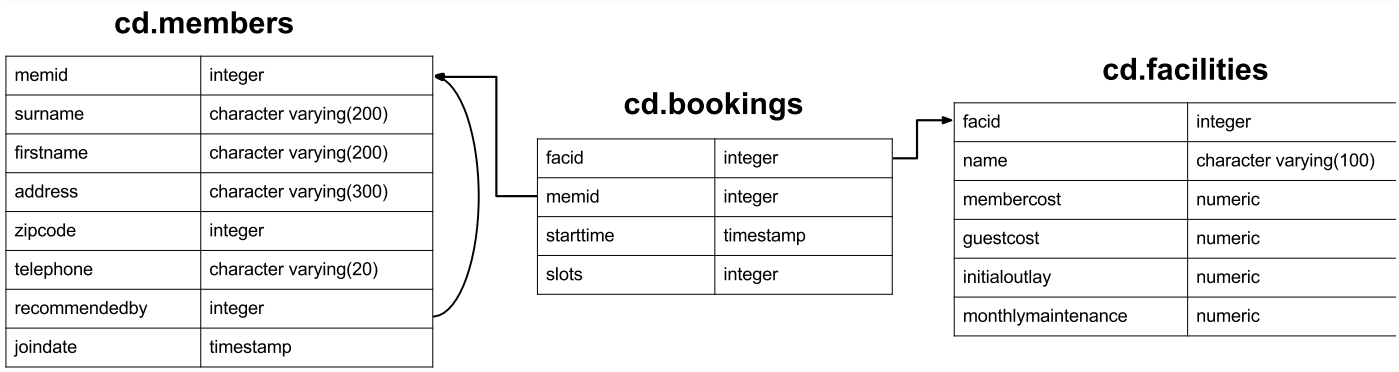
Produce a list of all members who have used a tennis court

Question

How can you produce a list of all members who have used a tennis court? Include in your output the name of the court and the name of the member formatted as a single column. Ensure no duplicate data, and order by the member name followed by the facility name.

Schema reminder ▲



Expected Results

member	facility
Anne Baker	Tennis Court 1
Anne Baker	Tennis Court 2
Burton Tracy	Tennis Court 1
Burton Tracy	Tennis Court 2
Charles Owen	Tennis Court 1
Charles Owen	Tennis Court 2
Darren Smith	Tennis Court 2
David Farrell	Tennis Court 1
David Farrell	Tennis Court 2
David Jones	Tennis Court 1

Your Answer

Hint Help Save Run Query

Answers and Discussion Hide

```
select distinct mems.firstname || ' ' || mems.surname as member, facs.name as facility
        from
                cd.members mems
                inner join cd.bookings bks
                        on mems.memid = bks.memid
                inner join cd.facilities facs
                        on bks.facid = facs.facid
        where
                facs.name in ('Tennis Court 2','Tennis Court 1')
order by member, facility
```

This exercise is largely a more complex application of what you've learned in prior questions. It's also the first time we' used more than one join, which may be a little confusing for some. When reading join expressions, remember that a joi is effectively a function that takes two tables, one labelled the left table, and the other the right. This is easy to visuali with just one join in the query, but a little more confusing with two.

Our second `INNER JOIN` in this query has a right hand side of cd.facilities. That's easy enough to grasp. The left hand side, however, is the table returned by joining cd.members to cd.bookings. It's important to emphasise this: the relational model is all about tables. The output of any join is another table. The output of a query is a table. Single columned lists are tables. Once you grasp that, you've grasped the fundamental beauty of the model.

As a final note, we do introduce one new thing here: the `||` operator is used to concatenate strings.

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