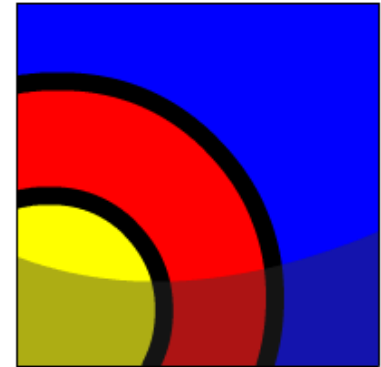


# Self Joins

### What Will I Learn?

**In this lesson, you will learn to:**

- Construct and execute a SELECT statement to join a table to itself using a self-join





## Why Learn It?

In data modeling, it was sometimes necessary to show an entity with a relationship to itself. For example, an employee can also be a manager. We showed this using the "pig's ear" relationship. Once we have a real employees table, a special kind of join called a self-join is required to access this data. You probably realize by now the importance of a data model once it becomes a database. It's no coincidence that the data model looks a lot like the tables we now have in the database.

### EMPLOYEE

id  
first name  
last name  
phone number  
hire date  
salary

```
SELECT worker.last_name || 'works for' || manager.last_name
FROM employees worker, employees manager
WHERE worker.manager_id = manager.employee_id;
```

**EMPLOYEES TABLE**

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MGR_ID	DEPT_ID
100	Steven	King	SKING	515.123.4567	17-JUN-87	AD_PRES	24000	(null)	(null)	90
101	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-89	AD_VP	17000	(null)	100	90

## Tell Me / Show Me

### SELF-JOIN

To join a table to itself, the table is given two names or aliases. This will make the database “think” that there are two tables. Choose alias names that relate to the data's association

with that table. In this example of a band, we have members of the band who play an instrument and members of the band who play an instrument and are their section's lead player or chair. A readable way to show this self-join is:

```
SELECT chair.last_name || ' is the section chair of ' ||  
player.last_name  
FROM band_members chair, band_members player  
WHERE player.chair_id = chair.member_id;
```



# Tell Me / Show Me

## Terminology

Key terms used in this lesson include:

Nonequijoin

Outer join

Self join

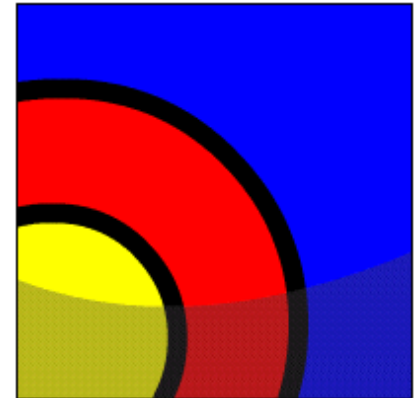




# Summary

**In this lesson you have learned to:**

- Construct and execute a SELECT statement to join a table to itself using a self-join.



# Summary

## Practice Guide

The link for the lesson practice guide can be found in the course outline.

