The FULL OUTER JOIN command

In this lesson, you will learn a fourth type of SQL join: the FULL OUTER JOIN. The FULL OUTER JOIN is a combination of all the joins that you've seen so far.
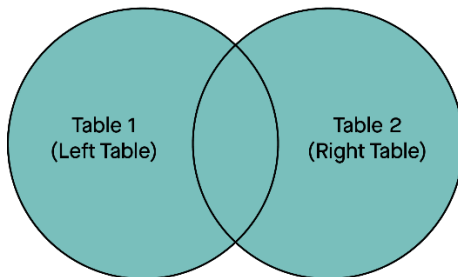
FULL OUTER JOIN

The **FULL OUTER JOIN** command returns all records from the left table (Table 1) and the right table (Table 2), regardless of if there are matches or not. If there are records in the left table that don't have a match in the right table, then the right table values will be populated by NULL. Similarly, if there are records in the right table that don't have a match in the left table, then NULL will populate the left table values. Keep in mind that because both matching and unmatching records are returned, your resulting data output can potentially be very large.

This command is useful when you have two tables of related data and want to see which records have attributes across both tables and which records don't.

The Venn diagram below shows the data that is returned from a **FULL OUTER JOIN**. The returned data is represented by the teal shaded area.

Full Outer Join

This is the structure of **FULL OUTER JOIN**:

```
1  SELECT column_name(s)
2  FROM table1_name
3  FULL OUTER JOIN table2_name
4  ON table1.column_name = table2.column_name;
```

The **FULL OUTER JOIN** command specifies that a **FULL OUTER JOIN** should take place. The **FULL OUTER JOIN** clause specifies the second table to be used in the join. The ON clause specifies the column names (from Table 1 and Table 2) that are used to link the tables.