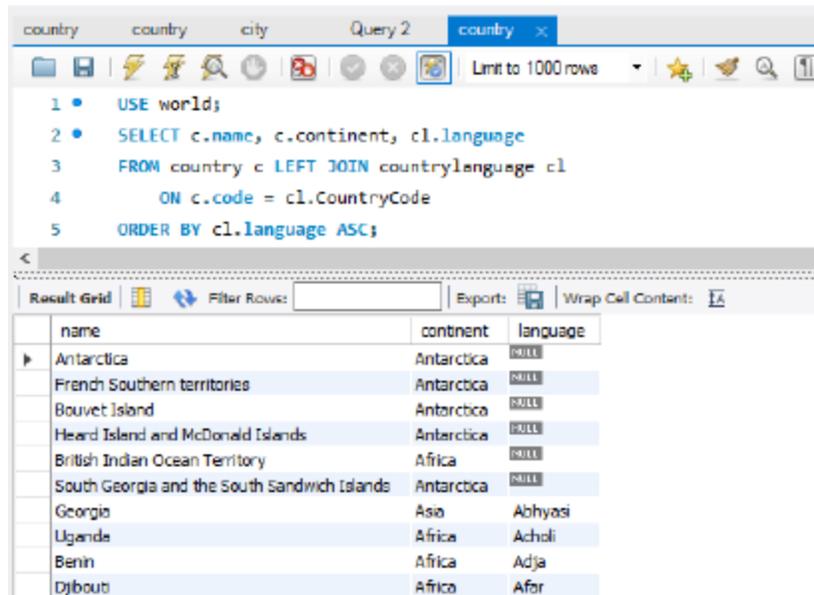# 2.3

The OUTER JOIN Clause

The Outer Join Clause

- An outer join will return all the rows from one table and only the rows from the other table that match the join condition
- You can use **LEFT JOIN** or **RIGHT JOIN**. If you use **LEFT JOIN**, all the rows from the table on the left of the equals (=) sign will be included in the result set whether the join condition is satisfied or not
- If you use **RIGHT JOIN**, all the rows from the table on the right of the equals (=) sign will be included in the result set whether the join condition is satisfied or not.

Below is a code snippet of a SQL statement with an outer join clause.

```
1 USE world;
2 SELECT c.name, c.continent, cl.language
3 FROM country c LEFT JOIN countrylanguage cl
4 ON c.code = cl.CountryCode
5 ORDER BY cl.language ASC;
```

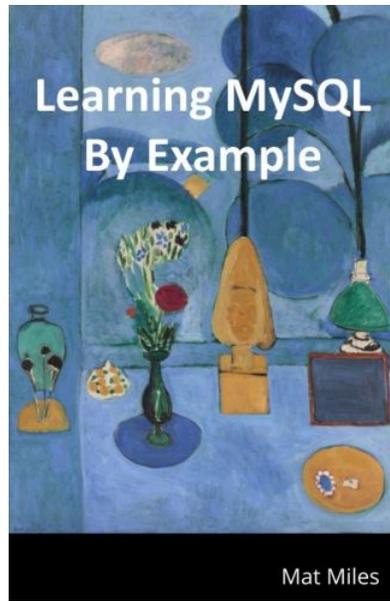*Results:*

SELECT c.name, c.continent, cl.language

- The "c." pre-pended to name and continent is a table alias to the country table. Therefore, return name and continent from the country table.
- The "cl" prepended to the language table is a table alias to the countrylanguage table. Therefore, return language from the countryLanguage table.

FROM country c LEFT JOIN countrylanguage cl

- "Country c" assigns "c" as an alias for "country"
  "countrylanguage cl" assigns "cl" as an alias for "countrylanguage"
- LEFT JOIN means that all rows on the left side of the JOIN operator (=) are included in the results whether they have a matching key from the table on the RIGHT side of the operator.

ON c.code = cl.CountryCode

- ON is the second part of the JOIN clause. It precedes the JOIN condition
- c.code refers to the code column from the country table and is a primary key. Since the key is on
  the LEFT side of the join condition, all rows from the country table will be included in the results
  whether they have a matching key in the countrylanguage table or not.
- Cl.CountryCode refers to the CountryCode on the countrylanguage table and is a foreign key to the country table. Only the rows that have a matching key in the country table will be included in the results.

Miles, M. (2021). *Learning MySQL By Example*. EdTech Books.
https://edtechbooks.org/learning_mysql