

## 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:*

```

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```

	name	continent	language
▶	Antarctica	Antarctica	NULL
	French Southern territories	Antarctica	NULL
	Bouvet Island	Antarctica	NULL
	Heard Island and McDonald Islands	Antarctica	NULL
	British Indian Ocean Territory	Africa	NULL
	South Georgia and the South Sandwich Islands	Antarctica	NULL
	Georgia	Asia	Abhyasi
	Uganda	Africa	Acholi
	Benin	Africa	Adja
	Djibouti	Africa	Afir

## 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.

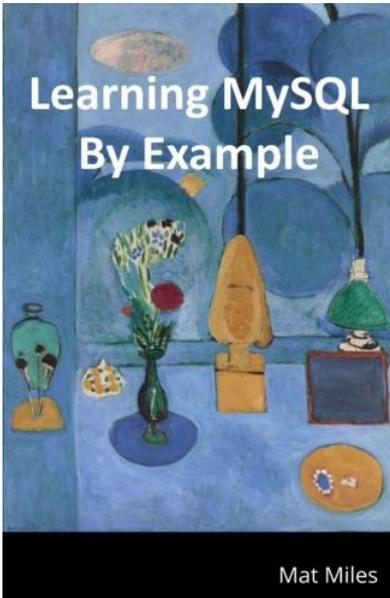
## FROM country c LEFT JOIN countrylanguage cl

- “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](https://edtechbooks.org/learning_mysql)