

How to Code a UNION

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- A **UNION** combines the results of two or more queries into a single result set
- Each result set must have the same number of columns
- The corresponding data types for each column must be compatible. However, the column names may be different from each result set
- A **UNION** removes duplicate rows by default
- You may interfile the results using an **ORDER BY** clause if there is a column with a common name.

Code Example:

```
1 USE world;  
2 SELECT name, population  
3 FROM city WHERE CountryCode = 'AUS'  
4 UNION  
5 SELECT name, population  
6 FROM country  
7 WHERE continent = 'Oceania'  
8 ORDER BY name;
```

Results:

```

1 • USE world;
2 • SELECT name, population
3   FROM city WHERE CountryCode = 'AUS'
4   UNION
5   SELECT name, population
6   FROM country
7   WHERE continent = 'Oceania'
8   ORDER BY name;
9

```

name	population
Adelaide	978100
American Samoa	68000
Austrolo	18886000
Brisbane	1291117
Cairns	92273
Canberra	322723
Central Coast	227657

Country and population from country table

City and population from cities table

SELECT name, population

FROM city

WHERE CountryCode = 'AUS'

- The first query returns the name and population from the city table.
- The filter (**WHERE CLAUSE**) of the query limits the country code to Australia.

UNION

- The '**UNION**' clause will combine this query with the results of the subsequent query.

SELECT name, population

FROM country

WHERE continent = 'Oceania'

- The second query returns the name and population from the country table.
- The filter (**WHERE CLAUSE**) of the query limits the continent code to Oceania.

ORDER BY name;

- It is possible to sort (**ORDER BY CLAUSE**) and interfile the results of both queries because each query shares a column with the same name. Otherwise, the **ORDER BY** clause would generate an error.





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