

SELECT from WORLD Tutorial

Language:	English • 日本語 • 中文
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name	continent	area	population	gdp
Afghanistan	Asia	652230	25500100	20343000000
Albania	Europe	28748	2831741	12960000000
Algeria	Africa	2381741	37100000	188681000000
Andorra	Europe	468	78115	3712000000
Angola	Africa	1246700	20609294	100990000000
...				

In this tutorial you will use the SELECT command on the table world:

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Introduction

1.

Read the notes about this table. Observe the result of running this SQL command to show the name, continent and population of all countries.

```
select name, continent, population from world
```

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Colombia	South America	47662000
Comoros	Africa	743798
Congo, Democratic Republic of	Africa	69360000
Congo, Republic of	Africa	4559000
Costa Rica	North America	4667096
Croatia	Europe	4290612
Cuba	Caribbean	11167325
Cyprus	Asia	865878
Czech Republic	Europe	10517400
Denmark	Europe	5634437
Djibouti	Africa	886000
Dominica	Caribbean	71293
Dominican Republic	Caribbean	9445281

Large Countries

2.

How to use WHERE to filter records. Show the name for the countries that have a population of at least 200 million. 200 million is 200000000, there are eight zeros.

```
SELECT name FROM world
WHERE population > 200000000
```

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Correct answer

name
Brazil
China
India
Indonesia
United States

Per capita GDP

3.

Give the name and the **per capita GDP** for those countries with a population of at least 200 million.

HELP:How to calculate per capita GDP

per capita GDP is the GDP divided by the population $GDP/population$

```
select name, gdp/population as 'per capita' from world  
where population > 200000000;
```

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Correct answer

name	per capita
Brazil	11115.2648
China	6121.7106
India	1504.7931
Indonesia	3482.0205
United States	51032.2945

sfwQ3



South America In millions

4.

Show the name and population in millions for the countries of the continent 'South America'. Divide the population by 1000000 to get population in millions.

```
select name, population/1000000 as 'population [m]' from world
where continent = 'South America'
```

Submit SQL

restore default

Argentina	42.6695
Bolivia	10.0273
Brazil	202.7940
Chile	17.7730
Colombia	47.6620
Ecuador	15.7742
Guyana	0.7849
Paraguay	6.7834
Peru	30.4751
Saint Vincent and the Grenadines	0.1090
Suriname	0.5342
Uruguay	3.2863
Venezuela	28.9461

France, Germany, Italy

5.

Show the name and population for France, Germany, Italy

```
select name, population from world where name in ('France', 'Germany', 'Italy');
```

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Correct answer

name	population
France	65906000
Germany	80716000
Italy	60782668

United

6.

Show the countries which have a name that includes the word 'United'

```
select name from world where name like '%United%';
```

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Correct answer

name
United Arab Emirates
United Kingdom
United States

Two ways to be big

7.

Two ways to be big: A country is **big** if it has an area of more than 3 million sq km or it has a population of more than 250 million.

Show the countries that are big by area or big by population. Show name, population and area.


```
select name, population, area from world where area>3000000 OR population > 250000000
```

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Correct answer

name	population	area
Australia	23545500	7692024
Brazil	202794000	8515767
Canada	35427524	9984670
China	1365370000	9596961
India	1246160000	3166414
Indonesia	252164800	1904569
Russia	146000000	17125242
United States	318320000	9826675

One or the other (but not both)

8.

Exclusive OR (XOR). Show the countries that are big by area (more than 3 million) or big by population (more than 250 million) but not both. Show name, population and area.

- Australia has a big area but a small population, it should be **included**.
- Indonesia has a big population but a small area, it should be **included**.
- China has a big population **and** big area, it should be **excluded**.
- United Kingdom has a small population and a small area, it should be **excluded**.

```
select name, population, area from world where population>250000000 XOR area > 3000000
```

Submit SQL[restore default](#)

Correct answer

name	population	area
Australia	23545500	7692024
Brazil	202794000	8515767
Canada	35427524	9984670
Indonesia	252164800	1904569
Russia	146000000	17125242

Rounding

9.

Show the name and population in millions and the GDP in billions for the countries of the continent 'South America'. Use the ROUND function to show the values to two decimal places.

For Americas show population in millions and GDP in billions both to 2 decimal places.

Millions and billions

Missing decimals


```
select name, ROUND(population/1000000,2) as 'population M', ROUND(GDP/1000000000,2)as 'GDP B' from
world where continent = 'South America';
```

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Argentina	42.67	477.03
Bolivia	10.03	27.04
Brazil	202.79	2254.11
Chile	17.77	268.31
Colombia	47.66	369.81
Ecuador	15.77	87.50
Guyana	0.78	2.85
Paraguay	6.78	25.94
Peru	30.48	204.68
Saint Vincent and the Grenadines	0.11	0.69
Suriname	0.53	5.01
Uruguay	3.29	49.92
Venezuela	28.95	382.42

Play the SELECT card game

1:14



SCORE: 5

```
SELECT card
FROM cards
WHERE number = 1
AND colour = 'red'
```

SELECT Card Game

Trillion dollar economies

10.

Show the name and per-capita GDP for those countries with a GDP of at least one trillion (1000000000000; that is 12 zeros). Round this value to the nearest 1000.

Show per-capita GDP for the trillion dollar countries to the nearest \$1000.

```
select name, ROUND(GDP/population,-3) as 'per capita' from world where GDP > 1000000000000;
```

Submit SQL

restore default

Canada	45000
China	6000
France	40000
Germany	42000
India	2000
Italy	33000
Japan	47000
Mexico	10000
Russia	14000
South Korea	22000
Spain	28000
United Kingdom	39000
United States	51000

Name and capital have the same length

11.

Greece has capital Athens.

Each of the strings 'Greece', and 'Athens' has 6 characters.

Show the name and capital where the name and the capital have the same number of characters.

- You can use the LENGTH function to find the number of characters in a string

For Microsoft SQL Server the function LENGTH is LEN

```
SELECT name, capital FROM world WHERE LENGTH(name) = LENGTH(capital)
```

Submit SQL

restore default

Ghana	Accra
Greece	Athens
Luxembourg	Luxembourg
Mauritania	Nouakchott
Peru	Lima
Poland	Warsaw
Russia	Moscow
Rwanda	Kigali
San Marino	San Marino
Singapore	Singapore
Taiwan	Taipei
Turkey	Ankara
Zambia	Lusaka

Matching name and capital

12.

The capital of Sweden is Stockholm. Both words start with the letter 'S'.

Show the name and the capital where the first letters of each match. Don't include countries where the name and the capital are the same word.

- You can use the function LEFT to isolate the first character.
- You can use <> as the NOT EQUALS operator.

```
SELECT name, capital
FROM world WHERE LEFT(name,1) = LEFT(capital,1) AND name <> capital;
```

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Marshall Islands	Majuro
Mexico	Mexico City
Monaco	Monaco-Ville
Mozambique	Maputo
Niger	Niamey
Panama	Panama City
Papua New Guinea	Port Moresby
Sao Tomã and Prãncipe	Sãfo Tomã
South Korea	Seoul
Sri Lanka	Sri Jayawardenepura Kotte
Sweden	Stockholm
Taiwan	Taipei
Tunisia	Tunis

All the vowels

13.

Equatorial Guinea and **Dominican Republic** have all of the vowels (a e i o u) in the name. They don't count because they have more than one word in the name.

Find the country that has all the vowels and no spaces in its name.

- You can use the phrase `name NOT LIKE '%a%'` to exclude characters from your results.
- The query shown misses countries like Bahamas and Belarus because they contain at least one 'a'

```
SELECT name FROM world
WHERE name LIKE '%a%' AND name LIKE '%e%' AND name LIKE '%i%' AND name LIKE '%o%' AND name LIKE '%u%' AND name NOT LIKE '% %';
```

[Submit SQL](#)[restore default](#)

Correct answer

name
Mozambique

What Next

- [BBC QUIZ](#)
- You can to continue practising the the same techniques and gain more experience of the basic skills on the Nobel table. The WHERE statement using the nobel table.
- You can learn about nested statements, these are instructive and entertaining, but not essential for beginners. Nested SELECT statements using the world table.

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