# **SELECT from WORLD Tutorial**

Language: English • 日本語 • 中文

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:

#### **Contents**

- 1 Introduction
- 2 Large Countries
- 3 Per capita GDP
- 4 South America In millions
- 5 France, Germany, Italy
- 6 United
- 7 Two ways to be big
- 8 One or the other (but not both)
- 9 Rounding
- 10 Trillion dollar economies
- 11 Name and capital have the same length
- 12 Matching name and capital
- 13 All the vowels
- 14 What Next

#### 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

Submit SQL

restore default

#### **Correct answer**

name	continent	population
Afghanistan	Asia	25500100
Albania	Europe	2821977
Algeria	Africa	38700000
Andorra	Europe	76098
Angola	Africa	19183590
Antigua and Barbuda	Caribbean	86295
Argentina	South America	42669500
	ъ .	2017400

#### **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

Submit SQL

restore default

#### **Correct answer**

n	a	n	le	

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

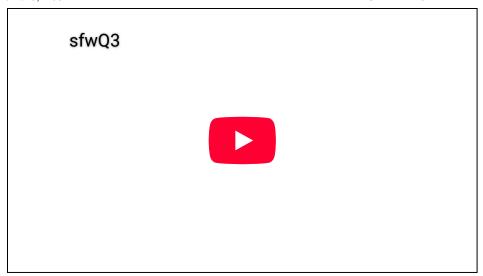
select name,gdp/population from world
where population>=200000000;

Submit SQL

restore default

# **Correct answer**

name	gdp/population
Brazil	11115.2648
China	6121.7106
India	1504.7931
Indonesia	3482.0205
United States	51032.2945



#### **South America In millions**





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 from world where continent like 'south america';

Submit SQL

restore default

#### **Correct answer**

name	population/1000000
Argentina	42.6695
Bolivia	10.0273
Brazil	202.7940
Chile	17.7730
Colombia	47.6620
Ecuador	15.7742
Guyana	0.7849

# France, Germany, Italy

5.



Show the name and population for France, Germany, Italy

select name, population from world
where name in ('France' , 'germany' , 'italy');

Submit SQL

restore default

# **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%';

Submit SQL

restore default

#### **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 population>250000000 or area>3000000;

#### Submit SQL

restore default

# **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
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#### 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 area>3000000 xor population>250000000;

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), round(gdp/1000000000,2) from world where continent like 'south america';

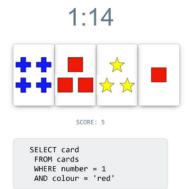
Submit SQL

restore default

#### **Correct answer**

name	round(population/1000000,2)	round(gdp/100000000,2)
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
F.	( =0	27.04

#### Play the SELECT card game



SELECT Card Game

#### **Trillion dollar economies**

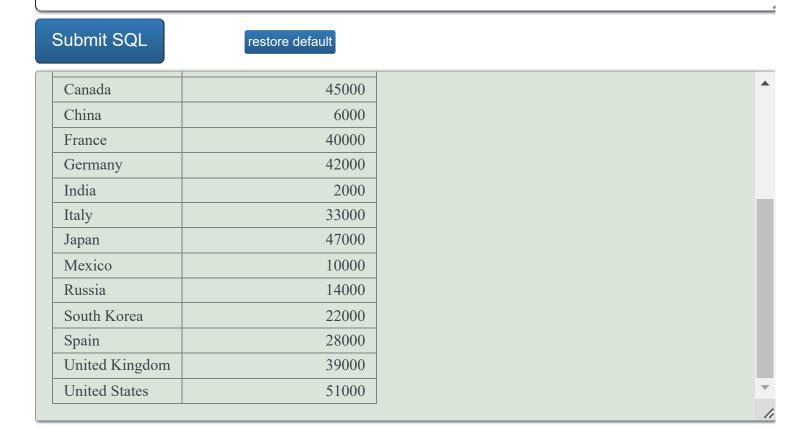
10.



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) from world where gdp>=1000000000000;



### Name and capital have the same length



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

#### **Correct answer**

	name	capital
	Algeria	Algiers
	Angola	Luanda
	Armenia	Yerevan
ĺ	Botswana	Gaborone
	Canada	Ottowa
	Djibouti	Djibouti
	Egypt	Cairo
		m 111

## 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;

Submit SQL

restore default

#### **Correct answer**

name	capital
Algeria	Algiers
Andorra	Andorra la Vella
Barbados	Bridgetown
Belize	Belmopan
Brazil	BrasÃlia
Brunei	Bandar Seri Begawan
Burundi	Bujumbura
C . 1	G . 1 G'.

#### 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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