

# SELECT from WORLD Tutorial

Language: English • 日本語 • 中文

<b>name</b>	<b>continent</b>	<b>area</b>	<b>population</b>	<b>gdp</b>
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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## 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
		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;
```

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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*

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

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## Correct answer

name	per_capita_gdp
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_millions
FROM world
WHERE continent = 'South America';
```

Submit SQL

restore default

## Correct answer

name	population_millions
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');
```

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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%';
```

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 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

## 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 AND population <= 250000000)
  or (area <= 3000000 AND 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

## Round

# 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 / 1000000.0, 2) as population_millions,
    round(gdp / 1000000000.0, 2) as gdp_billions
from world
where continent = 'south america';
```

**Submit SQL**

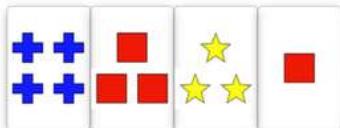
restore default

## Correct answer

<b>name</b>	<b>population_millions</b>	<b>gdp_billions</b>
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
	6.50	65.04

Play the SELECT card game (<https://sqlzoo.net/40289347/>)

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_gdp_rounded
from world
where gdp >= 1000000000000;
```

[Submit SQL](#)

[restore default](#)

## Correct answer

name	per_capita_gdp_rounded
Australia	66000
Brazil	11000
Canada	45000
China	6000
France	40000
Germany	42000
India	2000
Tunisia	22000

## 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](#)

## Correct answer

name	capital
Algeria	Algiers
Angola	Luanda
Armenia	Yerevan
Botswana	Gaborone
Canada	Ottowa
Djibouti	Djibouti
Egypt	Cairo
Finland	Tallinn

## 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	Brasília
Brunei	Bandar Seri Begawan
Burundi	Bujumbura
Côte d'Ivoire	Abidjan

## 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 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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