

SELECT from WORLD Tutorial

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|-----------|--------------------|
| 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`:

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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
```

[Submit SQL](#)

[restore default](#)

result

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

| 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 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 |

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 from world where continent = '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 |
| Peru | 27.6024 |

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 area >= 3000000  
or population >= 250000000;
```

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 |

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**.

Submit SQL

restore default

result

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

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

result

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.

Submit SQL

restore default

result

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, LENGTH(name), continent, LENGTH(continent), capital, LENGTH(capital)
  FROM world
 WHERE name LIKE 'G%'
```

[Submit SQL](#)

[restore default](#)

result

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, LEFT(name,1), capital
FROM world
```

Submit SQL

restore default

result

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 'B%'
   AND name NOT LIKE '%a%'
```

Submit SQL

restore default

result

What Next

- BBC QUIZ
- You can continue practising 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.