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

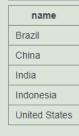| name	continent	population
Afghanistan	Asia	25500100
Albania	Europe	2821977
Algeria	Africa	38700000
Andorra	Europe	76098
Angola	Africa	19183590
Antigua and Barbuda	Caribbean	86295
Argentina	South America	42669500

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

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	
Brazil	11115.264751422625
China	6121.710598592322
India	1504.793124478397
Indonesia	3482.020488188676
United States	51032.29454636844

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

Chile	17.773
Colombia	47.662
Ecuador	15.7742
Guyana	0.784894
Paraguay	6.783374
Peru	30.475144
Saint Vincent and the Grenadines	0.109
Suriname	0.534189
Uruguay	3.286314
Venezuela	28.946101

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

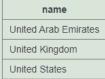| name	population
France	65906000
Germany	80716000
Italy	60782668

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

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
United States	318320000	9826675

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 OR area>3000000)
AND NOT(population>250000000 AND area>3000000)
```

Correct answer

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

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 South America show population in millions and GDP in billions both to 2 decimal places.

Millions and billions

```
SELECT name, ROUND(population/1000000,2), ROUND(gdp/1000000000,2)FROM
world
WHERE continent='South America'
```

Correct answer

name		
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	87.5
Guyana	0.78	2.85

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
```

Submit SQL   Restore default

Correct answer

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

11.

Greece has capital Athens.

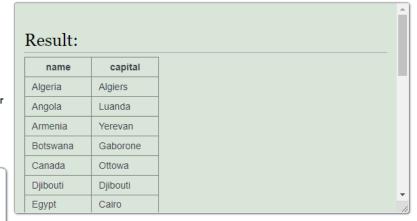Each of the strings 'Greece', and 'Athens' has 6 characters.

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 LEN(name)=LEN(capital)
```

Submit SQL   Restore default

Result:

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

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

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

Submit SQL   Restore default

Correct answer

name	capital
Algeria	Algiers
Angola	Luanda
Botswana	Gaborone
Canada	Ottawa
Djibouti	Djibouti
Egypt	Cairo
Estonia	Tallinn

PostgreSQL

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

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