Description

Field	Type	Null	Key	Default	Notes
name	varchar(50)	Name of the country - the primary key.			
continent	varchar(60)	Not strictly continent			
area	decimal(10,0)	YES		null	
population	decimal(11,0)	YES		null	
gdp	decimal(14,0)	YES		null	
capital	varchar(60)	YES		null	
tld	varchar(5)	YES		null	
flag	varchar(255)	YES		null	

1 Bigger than Russia

List each country name where the population is larger than that of 'Russia'.

```
SELECT name FROM world
WHERE population >
     (SELECT population FROM world
      WHERE name='Russia')
```

2 Richer than UK

Show the countries in Europe with a per capita GDP greater than 'United Kingdom'.

```
SELECT name FROM world
WHERE continent='Europe'
AND gdp/population >
(SELECT gdp/population FROM world
WHERE name = 'United Kingdom')
```

3 Neighbours of Argentina and Australia

List the name and continent of countries in the continents containing either Argentina or Australia. Order by name of the country.

```
SELECT name,continent FROM world
WHERE continent IN (SELECT continent FROM world
WHERE name in ('Argentina','Australia'))
ORDER by name ASC
```

4 Between Canada and Poland

Which country has a population that is more than Canada but less than Poland? Show the name and the population.

```
SELECT name,population from WORLD
WHERE population > (SELECT population from WORLD
WHERE name='Canada')
AND population < (SELECT population from WORLD
WHERE name='Poland')
```

Here is an alternative:

```
SELECT name,population FROM world
WHERE population BETWEEN
(SELECT population+1 FROM world WHERE name='Canada')
AND
(SELECT population-1 FROM world WHERE name='Poland')
```

5 Percentages of Germany

Show the name and the population of each country in Europe. Show the population as a percentage of the population of Germany.

```
Select name,CONCAT(CAST(ROUND(100*population/(SELECT population FROM world WHERE name = 'Germany'),0) as
FROM world
WHERE continent='Europe'
```

6 Bigger than every country in Europe

Which countries have a GDP greater than every country in Europe? [Give the name only.] (Some countries may have NULL gdp values)

```
SELECT name FROM world
where gdp > (SELECT MAX(gdp) FROM world WHERE continent='EUROPE')
```

Alternative:

```
SELECT name FROM world
  WHERE gdp > ALL
   (SELECT gdp FROM world
    WHERE continent = 'Europe'
      AND gdp IS NOT NULL)
```

7 Largest in each continent

Find the largest country (by area) in each continent, show the continent, the name and the area. The example is known as a correlated or synchronized sub-query.

```
SELECT continent, name, area FROM world x
  WHERE area>= ALL
    (SELECT area FROM world y
        WHERE y.continent=x.continent and area > 0)
```

8 First country of each continent (alphabetically)

List each continent and the name of the country that comes first alphabetically.

```
SELECT continent,name FROM world x
WHERE x.name <= ALL(SELECT name FROM world y
WHERE x.continent=y.continent)
```

9 Difficult Questions That Utilize Techniques Not Covered In Prior Sections

Find the continents where all countries have a population ¡= 25000000. Then find the names of the countries associated with these continents. Show name, continent and population.

```
SELECT name,continent,population FROM world x
WHERE 25000000>= ALL(SELECT population FROM world y
where x.continent = y.continent AND y.population>0)
```

10

Some countries have populations more than three times that of any of their neighbours (in the same continent). Give the countries and continents.

```
SELECT name,continent FROM world x
WHERE population>ALL(SELECT population*3 FROM world y
WHERE x.continent=y.continent
AND y.name != x.name)
```