SQL Query Exercises # 1

The following queries utilize the "world" database.

Write queries to return the following:

1. The name and population of all cities in Ontario, Canada

   ```
   SELECT name, population
   FROM city
   WHERE district = 'Ontario';
   ```

2. The name and population of all cities in Montana

   ```
   SELECT name, population
   FROM city
   WHERE district = 'Montana';
   ```

3. The name, form of government, and head of state of all countries in Europe

   ```
   SELECT name, governmentform, headofstate
   FROM country
   WHERE continent = 'Europe';
   ```

4. The name, population, surface area, and average life expectancy of all countries in Asia

   ```
   SELECT name, governmentform, headofstate
   FROM country
   WHERE continent = 'Europe';
   ```

5. The name, country code, and population of all cities with a population greater than 8 million people

   ```
   SELECT name, countrycode, population
   FROM city
   WHERE population > 8000000;
   ```

6. The name, country code, and population of all cities with a population less than one thousand people

```
SELECT name, countrycode, population
FROM city
WHERE population < 1000;
```

7. The name, continent, and GNP of all countries with a GNP greater than one trillion dollars

```
SELECT name, continent, gnp
FROM country
WHERE gnp > 1000000;
```

8. The name, continent, population, GNP, and average life expectancy of all countries with an average life expectancy greater than 80 years

```
SELECT name, continent, population, gnp, lifeexpectancy
FROM country
WHERE lifeexpectancy > 80;
```

9. The name and population of all cities in the USA with a population of greater than 1 million people

```
SELECT name, population
FROM city
WHERE countrycode = 'USA'
AND population > 1000000;
```

10. The name and population of all cities in China with a population of greater than 1 million people

```
SELECT name, population
FROM city
WHERE countrycode = 'CHN'
AND population > 1000000;
```

11. The name and region of all countries in North or South America

```
SELECT name, region
FROM country
```

```
FROM country
WHERE continent = 'North America'
OR continent = 'South America';
```

12. The name, continent, and head of state of all countries whose form of government is a monarchy

```
SELECT name, continent, headofstate
FROM country
WHERE governmentform LIKE '%Monarchy%';
```

13. The name of all cities in the USA with a population between 1 million and 2 million people

```
SELECT name
FROM city
WHERE countrycode = 'USA'
AND population >= 1000000
AND population <= 2000000;
```

14. The name and region of all countries in North or South America except for countries in the Caribbean

```
SELECT name, region
FROM country
WHERE (continent = 'North America'
OR continent = 'South America')
AND region <> 'Carribean';
```

15. The name, population, and GNP of all countries with a GNP greater than $1 trillion dollars and a population of less than 100 million people

```
SELECT name, population, gnp
FROM country
WHERE gnp > 1000000
AND population < 100000000;
```

16. The name and population of all cities in Texas that have a population of greater than 1 million people

```
SELECT name, population
FROM city
```

```
WHERE district = 'Texas'
AND population > 1000000;
```

17. The name and average life expectancy of all countries on the continent of Oceania

```
SELECT name, lifeexpectancy
FROM country
WHERE continent = 'Oceania';
```

18. The name and average life expectancy of all countries on the continent of Oceania for which an average life expectancy has been provided (i.e. not equal to null)

```
SELECT name, lifeexpectancy
FROM country
WHERE continent = 'Oceania'
AND lifeexpectancy IS NOT NULL;
```

19. The name of all countries on the continent of Oceania for which an average life expectancy has not been provided (i.e. equal to null)

```
SELECT name
FROM country
WHERE continent = 'Oceania'
AND lifeexpectancy IS NOT NULL;
```

20. The name, continent, GNP, and average life expectancy of all countries that have an average life expectancy of at least 70 years and a GNP between $1 million and $100 million dollars

```
SELECT name, continent, gnp, lifeexpectancy
FROM country
WHERE lifeexpectancy >= 70
AND gnp >= 1000000
AND gnp <= 100000000;
```

21. The per capita GNP (i.e. GNP divided by population) of all countries in Europe

```
SELECT name, gnp / population AS per_capita_gnp
FROM country
WHERE continent = 'Europe'
```

22. The number of years since independence for all countries that have a year of independence

```
SELECT name, 2016 - indepyear
FROM country
WHERE indepyear IS NOT NULL
```