Question 1 : Count how many cities are there in each country?

Answer:

```
USE world;

SELECT CountryCode, COUNT(*) AS total_cities
FROM city
GROUP BY CountryCode;
```

Explanation

Cities are grouped by country code, and COUNT is used to get the number of cities in each country.

Question 2 : Display all continents having more than 30 countries.

Answer:

```
USE world;

SELECT Continent, COUNT(*) AS total_countries
FROM country
GROUP BY Continent
HAVING COUNT(*) > 30;
```

Explanation

Countries are grouped by continent, and HAVING filters continents with more than 30 countries.

Question 3 : List regions whose total population exceeds 200 million.

Answer:

```
USE world;

SELECT Region, SUM(Population) AS total_population
FROM country
GROUP BY Region
HAVING SUM(Population) > 200000000;
```

Explanation

Population is summed region-wise, and HAVING filters regions above 200 million.

Question 4 : Find the top 5 continents by average GNP per country.

Answer:

```
USE world;

SELECT Continent, AVG(GNP) AS avg_gnp
FROM country
GROUP BY Continent
ORDER BY AVG(GNP) DESC
LIMIT 5;
```

Explanation

Average GNP is calculated continent-wise, then sorted in descending order, and top 5 continents are selected.

Question 5 : Find the total number of official languages spoken in each continent.

Answer:

```
USE world;

SELECT c.Continent, COUNT(cl.Language) AS total_official_languages
FROM country c
JOIN countrylanguage cl
ON c.Code = cl.CountryCode
WHERE cl.IsOfficial = 'T'
GROUP BY c.Continent;
```

Explanation

Country and countrylanguage tables are joined, and only official languages are counted continent-wise.

Question 6 : Find the maximum and minimum GNP for each continent.

Answer:

```
USE world;

SELECT Continent,
    MAX(GNP) AS max_gnp,
    MIN(GNP) AS min_gnp
FROM country
GROUP BY Continent;
```

Explanation

GNP values are grouped by continent, and MAX and MIN are used to get highest and lowest GNP.

Question 7 : Find the country with the highest average city population.

Answer:

```
USE world;

SELECT c.Name, AVG(ci.Population) AS avg_city_population
FROM country c
JOIN city ci
ON c.Code = ci.CountryCode
GROUP BY c.Name
ORDER BY avg_city_population DESC
LIMIT 1;
```

Explanation

City populations are averaged country-wise, and the country with the highest average is selected.

Question 8 : List continents where the average city population is greater than 200,000.

Answer:

```
USE world;

SELECT c.Continent, AVG(ci.Population) AS avg_city_population
FROM country c
JOIN city ci
ON c.Code = ci.CountryCode
GROUP BY c.Continent
HAVING AVG(ci.Population) > 200000;
```

Explanation

Average city population is calculated continent-wise, and HAVING filters continents above 200,000.

Question 9 : Find the total population and average life expectancy for each continent, ordered by average life expectancy descending.

Answer:

```
USE world;

SELECT Continent,
    SUM(Population) AS total_population,
    AVG(LifeExpectancy) AS avg_life_expectancy
FROM country
GROUP BY Continent
ORDER BY avg_life_expectancy DESC;
```

Explanation

Population and life expectancy are aggregated continent-wise, then results are ordered by average life expectancy in descending order.

Question 10 : Find the top 3 continents with the highest average life expectancy, but only include those where the total population is over 200 million.

Answer:

```
USE world;

SELECT Continent,
    AVG(LifeExpectancy) AS avg_life_expectancy,
    SUM(Population) AS total_population
FROM country
GROUP BY Continent
HAVING SUM(Population) > 200000000
ORDER BY avg_life_expectancy DESC
LIMIT 3;
```

Explanation

Continents are grouped first.
HAVING filters total population above 200 million, then results are sorted by average life expectancy and top 3 are selected.