SQL Exercises for World and Chinook Databases

# World Database

## Easy:

1. Find the names of all the countries in the database.

SELECT Name FROM `country`;

2. List all the cities in the city table from the country 'USA'.

SELECT \* FROM `city` WHERE CountryCode = "USA";

3. Retrieve the population and life expectancy for all countries in descending order of life expectancy.

SELECT Name, Population, LifeExpectancy FROM country ORDER BY LifeExpectancy DESC;

## Intermediate:

4. Find the total population of all countries in the region 'Eastern Europe'.

SELECT SUM(Population) FROM country WHERE Region = 'Eastern Europe';

5. List all cities with a population greater than 1 million, sorted by population in descending order.

SELECT Name, Population FROM city WHERE Population > 1000000 ORDER BY Population DESC;

6. Find the names of all countries where the official language is 'Spanish'.

SELECT country.Name FROM country

JOIN countrylanguage ON country.Code = countrylanguage.CountryCode

WHERE countrylanguage.Language = 'Spanish' AND countrylanguage.IsOfficial = 'T';

## Hard:

7. List the top 5 most populated cities in each continent.

SELECT city.Name, country.Continent, city.Population

FROM city

JOIN country ON city.CountryCode = country.Code

WHERE city.Population IN (

SELECT Population FROM city WHERE CountryCode = country.Code ORDER BY Population DESC LIMIT 5

)

ORDER BY country.Continent, city.Population DESC;

8. Find the country with the highest life expectancy in each region.

SELECT Name, Region, LifeExpectancy

FROM country c1

WHERE LifeExpectancy = (

SELECT MAX(LifeExpectancy)

FROM country c2

WHERE c2.Region = c1.Region

);

9. Calculate the average population of countries where more than 50% of the people speak an official language.

SELECT AVG(Population)

FROM country

WHERE Code IN (

SELECT CountryCode FROM countrylanguage WHERE Percentage > 50 AND IsOfficial = 'T'

);

# Chinook Database

## Easy:

1. List all the tracks from the album 'Let There Be Rock'.

2. Find the name and email of all customers.

3. Retrieve the names of all playlists in the database.

## Intermediate:

4. List the names of all artists who have albums in the database.

5. Find the number of tracks in each playlist.

6. Find all employees who report to 'Andrew Adams'.

## Hard:

7. Find the top 5 best-selling tracks based on total invoice amount.

8. Find the artist with the most albums in the database.

9. Find the total revenue generated by each genre.