SQL Challenges

Sakila Challenge SQL

1. List all actors.
2. Find the surname of the actor with the forename 'John'.
3. Find all actors with surname 'Neeson'.
4. Find all actors with ID numbers divisible by 10.
5. What is the description of the movie with an ID of 100?
6. Find every R-rated movie.
7. Find every non-R-rated movie.
8. Find the ten shortest movies.
9. Find the movies with the longest runtime, without using `LIMIT`.
10. Find all movies that have deleted scenes.
11. Using `HAVING`, reverse-alphabetically list the last names that are not repeated.
12. Using `HAVING`, list the last names that appear more than once, from highest to lowest frequency.
13. Which actor has appeared in the most films?
14. 'Academy Dinosaur' has been rented out, when is it due to be returned?
15. What is the average runtime of all films?
16. List the average runtime for every film category.
17. List all movies featuring a robot.
18. How many movies were released in 2010?
19. Find the titles of all the horror movies.
20. List the full name of the staff member with the ID of 2.
21. List all the movies that Fred Costner has appeared in.
22. How many distinct countries are there?
23. List the name of every language in reverse-alphabetical order.
24. List the full names of every actor whose surname ends with '-son' in alphabetical order by their forename.
25. Which category contains the most films?

World Challenge SQL

1. Using `COUNT`, get the number of cities in the USA.
2. Find out the population and life expectancy for people in Argentina.
3. Using `IS NOT NULL`, `ORDER BY`, and `LIMIT`, which country has the highest life expectancy?
4. Using `JOIN ... ON`, find the capital city of Spain.
5. Using `JOIN ... ON`, list all the languages spoken in the Southeast Asia region.
6. Using a single query, list 25 cities around the world that start with the letter F.
7. Using `COUNT` and `JOIN ... ON`, get the number of cities in China.
8. Using IS `NOT NULL`, `ORDER BY`, and `LIMIT`, which country has the lowest population? Discard non-zero populations.
9. Using aggregate functions, return the number of countries the database contains.
10. What are the top ten largest countries by area?
11. List the five largest cities by population in Japan.
12. List the names and country codes of every country with Elizabeth II as its Head of State. You will need to fix the mistake first!
13. List the top ten countries with the smallest population-to-area ratio. Discard any countries with a ratio of 0.
14. List every unique world language.
15. List the names and GNP of the world's top 10 richest countries.
16. List the names of, and number of languages spoken by, the top ten most multilingual countries.
17. List every country where over 50% of its population can speak German.
18. Which country has the worst life expectancy? Discard zero or null values.
19. List the top three most common government forms.
20. How many countries have gained independence since records began?

Movielens Challenge SQL

1. List the titles and release dates of movies released between 1983-1993 in reverse chronological order.
2. Without using `LIMIT`, list the titles of the movies with the lowest average rating.
3. List the unique records for Sci-Fi movies where male 24-year-old students have given 5-star ratings.
4. List the unique titles of each of the movies released on the most popular release day.
5. Find the total number of movies in each genre; list the results in ascending numeric order.