

CS-3200 Homework 5

SQL practice in MySQL

This assignment gives you another opportunity to hone your skills as an SQL programmer. Please download the self-contained exported database schema and import the schema into a database named *starwarsfinallastnamefirstinitial*, where *lastname* is your last name and *firstinitial* is the first letter of your first name. Please submit one *starwarsfinallastnamefirstinitial.sql* file to blackboard containing the answer to question 1 as a comment as well as the SQL queries for the other questions.

1. (10 points) Review the given schema and compare it to your original starwars schema design. Identify the differences between the downloaded schema and your original schema. For each identified difference state whether you believe the identified change: improves/decreases the readability of the schema, improves/decreases the mechanics of the data integrity, or is a variation of the same solution.

Write SQL queries that answer the following questions:

2. (10 points) For all characters, produce a list of the movies the character is in. For each movie, track the total number of scenes and the planet where the character appears. The result set should contain the character's name, the planet name, the movie name, and the sum of the movie scene time for that specific character, specific planet and specific movie. (Screen time is measured as Time of departure – Time of Arrival)
3. (10 points) Count the number of planets each character has appeared on.
4. (10 points) Count the number of characters that appear in a desert.
5. (10 points) What planet has been visited by the most number of characters?
6. (10 points) What planet has been visited by all characters?
7. (5 points) Make a separate table from the timetable table – where the records are for the first movie. Name the table Movie1Timings.
8. (10 points) Which movie does 'Lando Calrissian' have the most screen time? (Screen time is measured as DepartureTime –ArrivalTime)
9. (5 points) For each planet type create an aggregated field that contains a list of character names that have appeared on that planet. The result set should contain the planet type and the grouped character names. Do not duplicate names within the grouped list of character names .
10. (5 points) Which planet type has the fewest number of characters appearing on it in movie 2?
11. (5 points) How many characters are "rebels"?
12. (5 points) Make a separate table from the timetable table – where the tuples are the timings for the rebel characters that appear in the first movie. Name the table RebelsinMovie1Timings.
13. (5 points) List the names of the characters that have the same affiliation as their home planet.