DA6823

Kilger

Exercise 2

SQL

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# Note: This was done in PostGreSQL, as it was the database system I already had from my SQL udemy class. The client I used was pgAdmin; I used the Paglia database which is the PostGreSQL version of Saklia (the video rental DB).

This exercise utilizes the built-in SQL schema in MySQL called sakila. You can issue the command use saklia to access the database. It is a simple video rental database. Do the following things using that database. The assignment that you hand in should have the sql script that does all of these things as well as the csv files that are requested in each of the steps.

1. Find the table named film. Tell me what the structure of that table is (hint you can copy and paste the definition from the information window of mysql.

**5.1.7 The film Table**

The film table is a list of all films potentially in stock in the stores. The actual in-stock copies of each film are represented in the[inventory](https://dev.mysql.com/doc/sakila/en/sakila-structure-tables-inventory.html) table.

The film table refers to the [language](https://dev.mysql.com/doc/sakila/en/sakila-structure-tables-language.html) table and is referred to by the [film\_category](https://dev.mysql.com/doc/sakila/en/sakila-structure-tables-film_category.html), [film\_actor](https://dev.mysql.com/doc/sakila/en/sakila-structure-tables-film_actor.html), and [inventory](https://dev.mysql.com/doc/sakila/en/sakila-structure-tables-inventory.html) tables.

**Columns**

* film\_id: A surrogate primary key used to uniquely identify each film in the table.
* title: The title of the film.
* description: A short description or plot summary of the film.
* release\_year: The year in which the movie was released.
* language\_id: A foreign key pointing at the [language](https://dev.mysql.com/doc/sakila/en/sakila-structure-tables-language.html) table; identifies the language of the film.
* original\_language\_id: A foreign key pointing at the [language](https://dev.mysql.com/doc/sakila/en/sakila-structure-tables-language.html) table; identifies the original language of the film. Used when a film has been dubbed into a new language.
* rental\_duration: The length of the rental period, in days.
* rental\_rate: The cost to rent the film for the period specified in the rental\_duration column.
* length: The duration of the film, in minutes.
* replacement\_cost: The amount charged to the customer if the film is not returned or is returned in a damaged state.
* rating: The rating assigned to the film. Can be one of: G, PG, PG-13, R, or NC-17.
* special\_features: Lists which common special features are included on the DVD. Can be zero or more of: Trailers,Commentaries, Deleted Scenes, Behind the Scenes.
* last\_update: The time that the row was created or most recently updated.

1. From the film table, select all of the films that have a rating of R. Export that table as a csv file with the name **r films** and save that csv file as part of your work you turn in .

select title, rating

from film

where rating = 'R';

1. Next, select all of the films in the film table that have a length of 120 to 140 minutes. Export that table with the name **films\_120\_to\_140** and save that csv file as part of your work you turn in.

select title, length

from film

where length > 120 and length < 140;

1. Sum up the number of minutes in all the films in the film table by rating. Show me that result.

select title, rating

from film

where rating = 'R';

1. Using the customer and rental tables, join them together so that there is one record with all the customer information combined with the rental information for each film rental. Export the file as a csv file.

select customer.last\_name, customer.first\_name, customer.customer\_id, customer.email, rental.rental\_date, rental.rental\_id, rental.customer\_id, rental.return\_date

from customer

left join rental

on customer.customer\_id = rental.customer\_id

;