OLA SMEHA
FSD 01
SQL ASSIGNMENT 01

Documentation Analysis of the Database:

We have 16 tables:

actor, address, category, city, country, customer, film, film_actor, film_category, inventory, language, payment, rental, staff, store, top_10_actors.

Table	Rows	Columns	Column Names
actor	200	3	actor_id, first_name, last_name
address	603	7	address_id, address, address2, district, city_id, postal_code, phone
category	16	2	category_id, name
city	600	3	city_id, city, country_id
country	109	2	country_id, country
customer	899	9	customer_id, store_id, first_name, last_name, email, address_id, activebool, create_date, active
film	1000	12	film_id, title, description, release_year, language_id, rental_duration, rental_rate, length, replacement_cost, rating, special_features, fulltext
film_actor	5462	2	[actor_id, film_id]
film_category	1000	2	[film_id, category_id]
inventory	4581	3	inventory_id, film_id, store_id
language	6	2	language_id, name
payment	14596	5	payment_id, customer_id, staff_id, rental_id, amount
rental	16044	6	rental_id, rental_date, inventory_id, customer_id, return_date, staff_id
staff	2	10	staff_id, first_name, last_name, address_id, email, store_id, active, username, password, picture
store	2	3	store_id, manager_staff_id, address_id
top_10_actors	10	4	id, first_name, last_name, total_films

🟥 primary key

Analysis:

This database is a movie rental database.

- The actor table contains the first and last names of actors.
- The address table contains addresses of customers, staff and stores, as its primary key appears in the customer, staff and store tables.
- The category table contains the film categories.
- The city table contains city names. It is referred to in the address table.
- The country table contains country names. It is referred to in the city table. So we could find out in which cities the customers, staff and stores are located.
- The customer table contains the names and contact info of customers. It refers to the address table and is referred to by the payment and rental tables.
- The film table contains movie titles, description, date of release, rental details, rating and other info. It is related to the language, film_actor, film_category, and inventory tables, so one can retrieve info about the language the film is in as well as who the actors in it are, its category and how many copies of each film are available in the inventory.
- The film_actor table refers to the actor and film tables. It contains info about what actors act in what movies.
- The film_category table refers to the film and category tables.
- The inventory table refers to the film and store tables. It contains a row for each copy of a movie in a store.
- The language table contains the list of languages of the movies.
- The payment table contains payment info such as the costumers who rented the movies and the amount they paid. It refers to the customer, staff and rental tables.
- The rental table contains rental info like the costumers who rented copies of movies and the dates they rented them and returned them. It refers to the inventory, customer and staff tables. The staff_id refers to the employee who was in charge of renting the films.
- The staff table contains the first and last names of the staff working in the stores in addition to their personal and contact information and their activity status. It refers to the address and store tables.
- The store table contains the list of stores, their manager id's and their addresses. It refers to the address table.
- The top_10_actors contains the names of the top 10 actors and the number of movies they performed in.