

Data Analyst Assignment Guide

This guide outlines each assignment task, clarifying your objectives and the database relationships you'll need to navigate. Use the hints and table references to construct your queries.

Before You Begin: Understanding the Goal

Always start by reading and understanding the goal of each task. Before writing any query, ask yourself:

- What information am I trying to retrieve?
- What does the final output need to look like?
- Which tables contain the data I need?
- How are these tables connected?

Taking time to think through these questions will help you approach each query with clarity and avoid unnecessary trial and error.

1. List Actors in "Academy Dinosaur"

Goal: List the full names (first and last) of all actors who appeared in the film titled "Academy Dinosaur".

Relevant Tables: actor, film_actor, film

Hint: Join actor → film_actor → film.

2. Films Per Category

Goal: For each film category, show how many films are in that category.

Relevant Tables: film_category, category

Hint: film_category links film and category.

3. Film Titles and Their Language

Goal: Show the titles of films along with the name of their language.

Relevant Tables: film, language

Hint: Join film → language.

4. Customers and Their Store's City

Goal: Find the customers' full names and the city of the store where they are registered.

Relevant Tables: customer, store, address, city

Hint: Join customer → store → address → city.

5. Rentals with Film Title and Customer Name

Goal: List all rentals (rental date, return date) along with the film title and the customer's name.

Relevant Tables: rental, inventory, film, customer

Hint: For title: rental → inventory → film

For name: rental → customer

6. Total Payment Amount Per Staff Member

Goal: Show each staff member's full name and the total amount of payments they have processed.

Relevant Tables: payment, staff

Hint: Join payment → staff.

7. Films That Are Not Rented

Goal: Identify films that are not rented (films in film that don't appear in rental via inventory).

Relevant Tables: film, inventory, rental

Hint: Use a left join or NOT EXISTS to detect films with no rentals.

8. Inventory Count Per Store

Goal: For each store, show the number of inventory items it holds (include store id and count).

Relevant Tables: inventory, store

Hint: inventory → store.

9. Inactive Customers and Their Rental Count

Goal: Show which customers are inactive (active = FALSE) and the number of rentals they made (if any).

Relevant Tables: customer, rental

Hint: Join customer → rental, group by customer.

10. Top 5 Actors by Film Count

Goal: List the top 5 actors by number of films they've appeared in (show actor full name and count).

Relevant Tables: actor, film_actor, film

Hint: Join actor → film_actor → film, then group and rank.

General Tips

- **Understand the goal first:** Read each task carefully and visualize the expected output.
- **Map relationships:** Use the hints to understand how tables connect.
- **Group and filter:** For counts and rankings, remember to group or sort as needed.
- **Review carefully:** If stuck, revisit the table relationships and task requirements.

Good luck with your analysis! If you need further clarification on relationships or how to approach a query, don't hesitate to ask.