DB Assignment 4

## *Abdullah Alshamrani*

## *Date: 10/30/2024*

# SQL Section

## Problem 1: Average Length of Films in Each Category A screen shot of a computer Description automatically generated

### Explanation:

This query calculates the average length of films for each category by joining the film, film\_category, and category tables. The results are displayed alphabetically by category name.

Result

A screenshot of a computer

Description automatically generated

## Problem 2: Category with Longest and Shortest Average Film Length

A screenshot of a computer program

Description automatically generated

### Explanation:

This query retrieves the category with the longest or shortest average film length by calculating and ordering the average film length for each category.

Result

A black and white screen with white text

Description automatically generatedA screenshot of a computer

Description automatically generated

## Problem 3: Customers Who Rented Action but Not Comedy or Classics A screen shot of a computer program Description automatically generated

### Explanation:

This query retrieves customers who have rented films from the 'Action' category but not from 'Comedy' or 'Classics' by using a subquery.

Result

A black and white table with white text

Description automatically generated

## Problem 4: Actor with Most Appearances in English-Language Movies

A screen shot of a computer program

Description automatically generated

### Explanation:

This query identifies the actor who has appeared in the most English-language movies by joining the actor, film\_actor, film, and language tables.

Result

A screenshot of a computer

Description automatically generated

## Problem 5: Number of Distinct Movies Rented for Exactly 10 Days from Mike's Store

A screen shot of a computer program

Description automatically generated

### Explanation:

This query calculates the number of distinct movies rented for exactly 10 days from the store where staff member 'Mike' works.

Result

A screen shot of a movie

Description automatically generated

## Problem 6: Alphabetical List of Actors in Movie with Largest Cast

A screen shot of a computer

Description automatically generated

### Explanation:

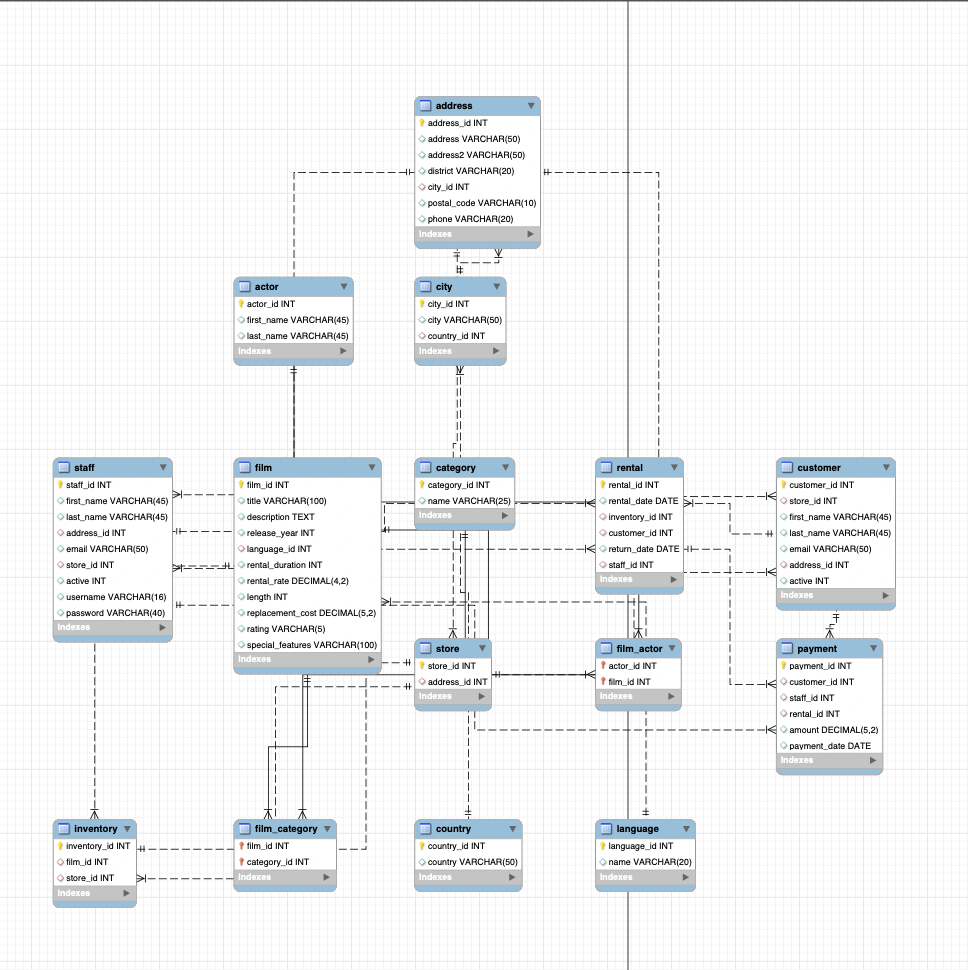
This query lists all actors in alphabetical order who appeared in the movie with the largest cast by counting actors per movie and ordering by the largest count.

Result

A table with names on it

Description automatically generated

**ERD Diagram:**

****