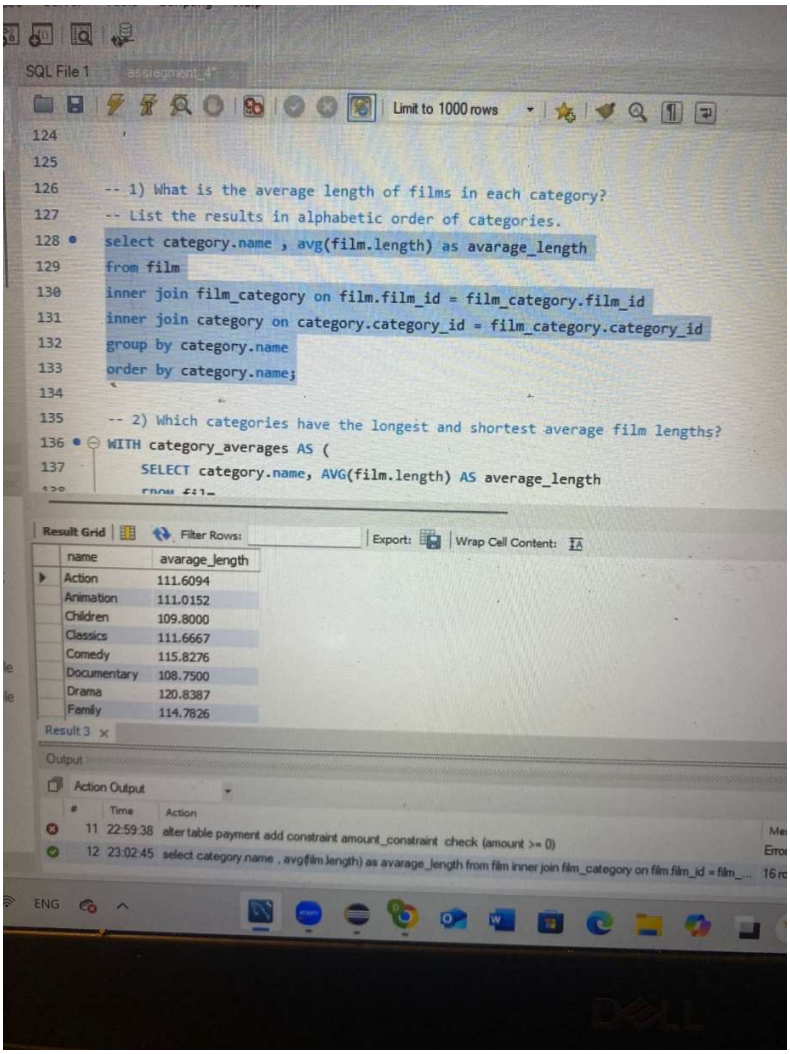
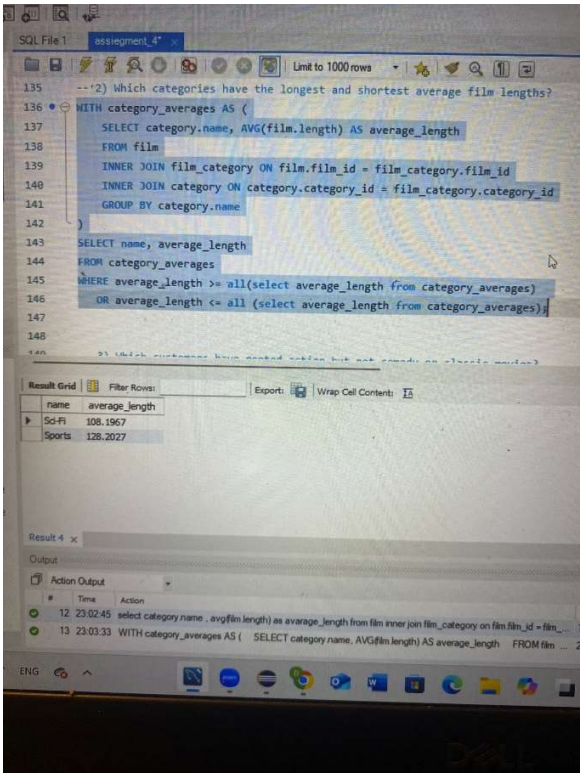
Assignment 4

1) What is the average length of films in each category? List the results in alphabetic order of categories.



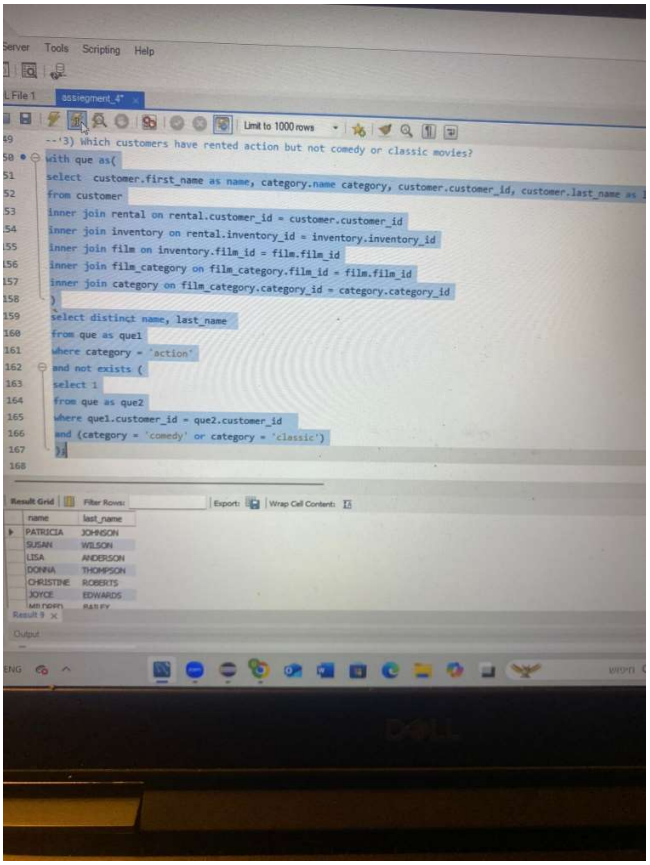
Explanation: This query calculates the average film length for each category. It joins the film, film_category, and category tables to relate films with their respective categories. The AVG function computes the average length, and the results are grouped by category name. Finally, the results are sorted in alphabetical order of categories.

2) Which categories have the longest and shortest average film lengths?



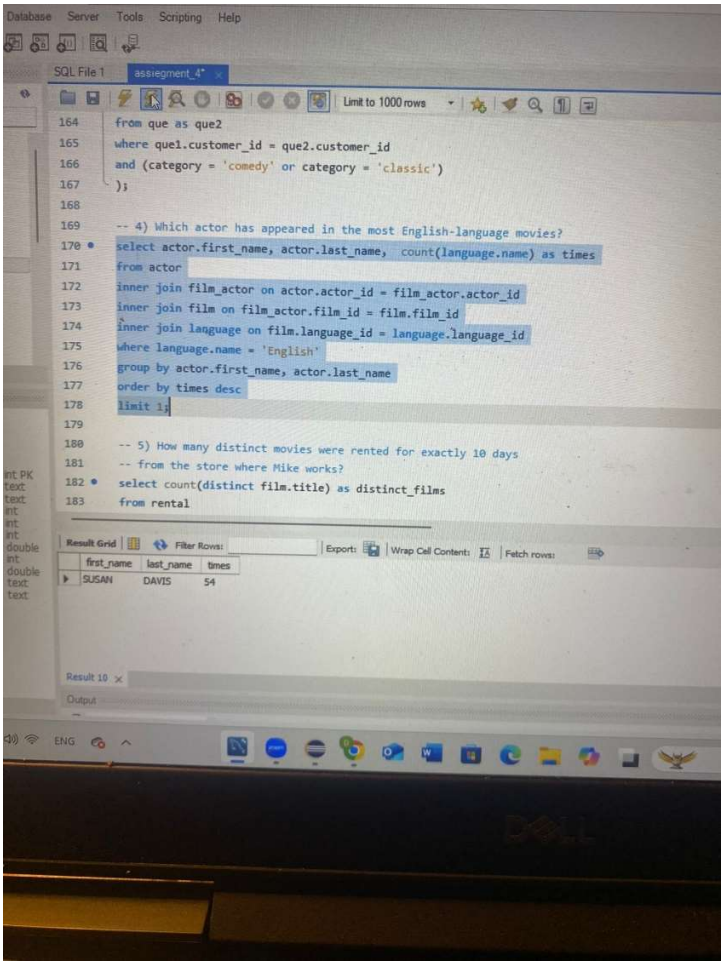
Explanation: This query first creates a common table expression (CTE) named category_averages that computes the average length of films for each category. The outer query selects the categories that have the longest and shortest average lengths by comparing each category's average length against all others using the ALL keyword.

3) Which customers have rented action but not comedy or classic movies?



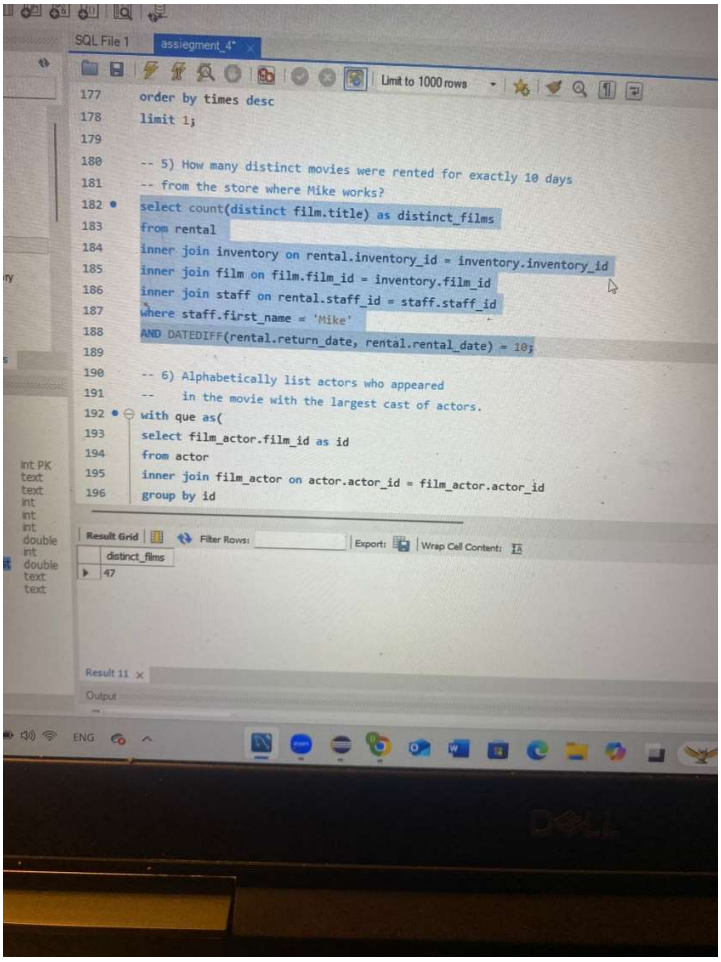
Explanation: This query identifies customers who have rented action films but have not rented any comedy or classic films. It uses a CTE (que) to join several tables and gather relevant data. The main query then selects distinct names and last names of customers from que who rented action films and excludes any customer who has rented films in the comedy or classic categories by checking with the NOT EXISTS clause.

4) Which actor has appeared in the most English-language movies?



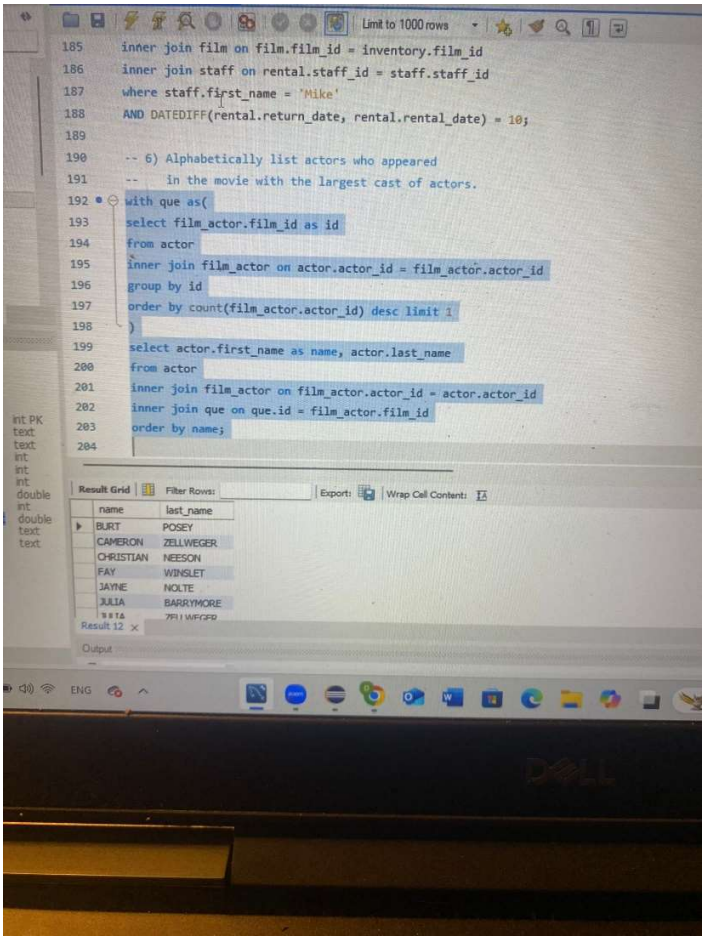
Explanation: This query finds the actor who has appeared in the most English-language films. It joins the actor, film_actor, film, and language tables. The WHERE clause filters for films with the language 'English', and the COUNT function counts the occurrences of each actor in these films. The results are grouped by actor and ordered by the count in descending order, limiting the output to the top actor.

5) How many distinct movies were rented for exactly 10 days from the store where Mike works?



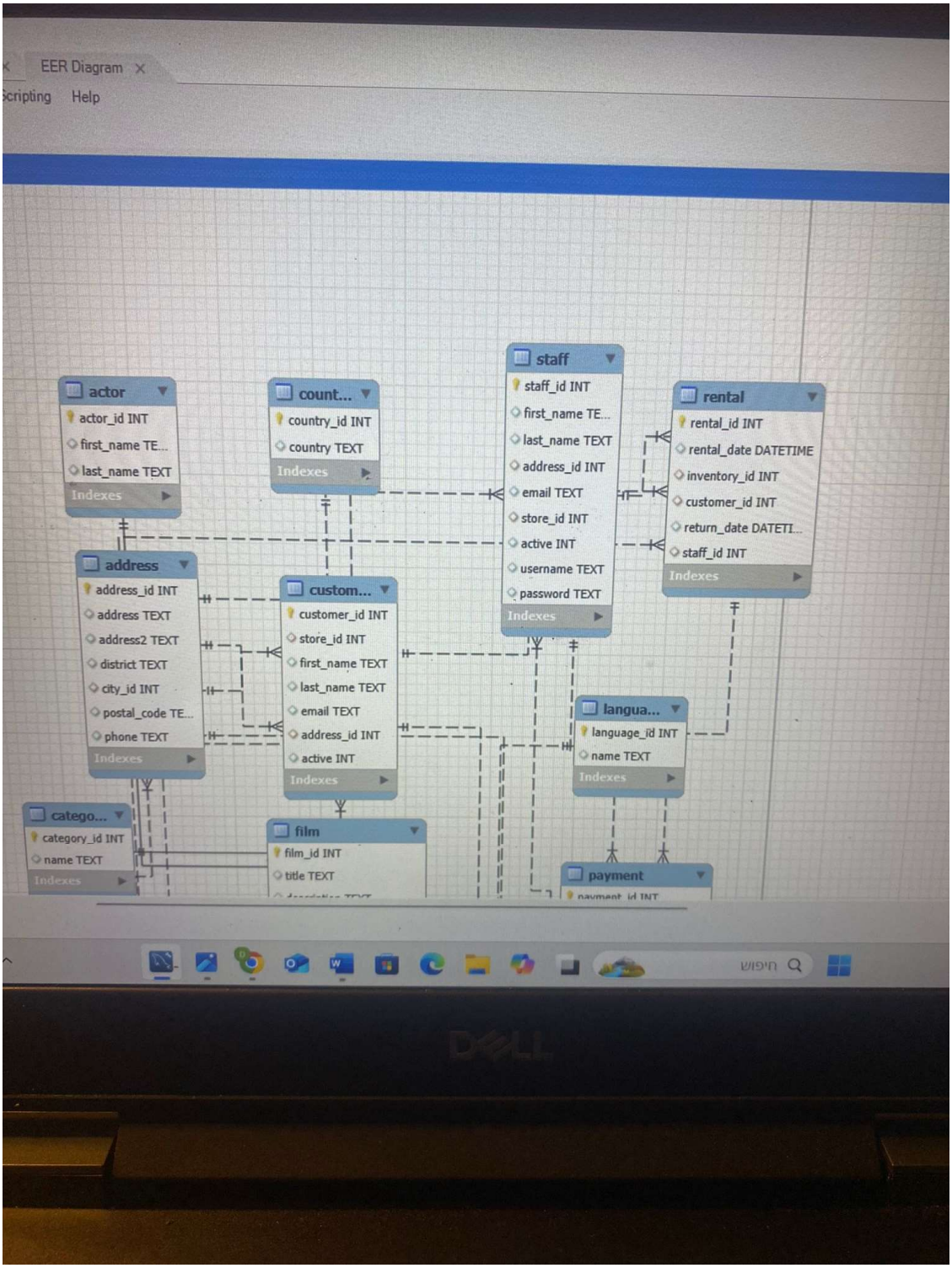
Explanation: This query counts the distinct titles of movies that were rented for exactly 10 days from the store where Mike works. It joins the rental, inventory, film, and staff tables. The WHERE clause filters for rentals processed by staff named Mike and checks that the difference between the return and rental dates is exactly 10 days. The COUNT(DISTINCT film.title) ensures that only unique movie titles are counted.

6) Alphabetically list actors who appeared in the movie with the largest cast of actors:



Explanation: This query retrieves actors from the film that has the largest cast. It first creates a CTE (que) that identifies the film ID with the highest number of actors by counting the film_actor entries. The outer query then selects the first and last names of actors who appeared in that film by joining the actor and film_actor tables with the film ID from the CTE. Finally, the results are ordered alphabetically by the actor's first name.

ERD Diagram:


EER Diagram
Help
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last_name TEXT
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count...
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country TEXT
Indexes
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return_date DATETI...
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district TEXT
city_id INT
postal_code TE...
phone TEXT
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last_name TEXT
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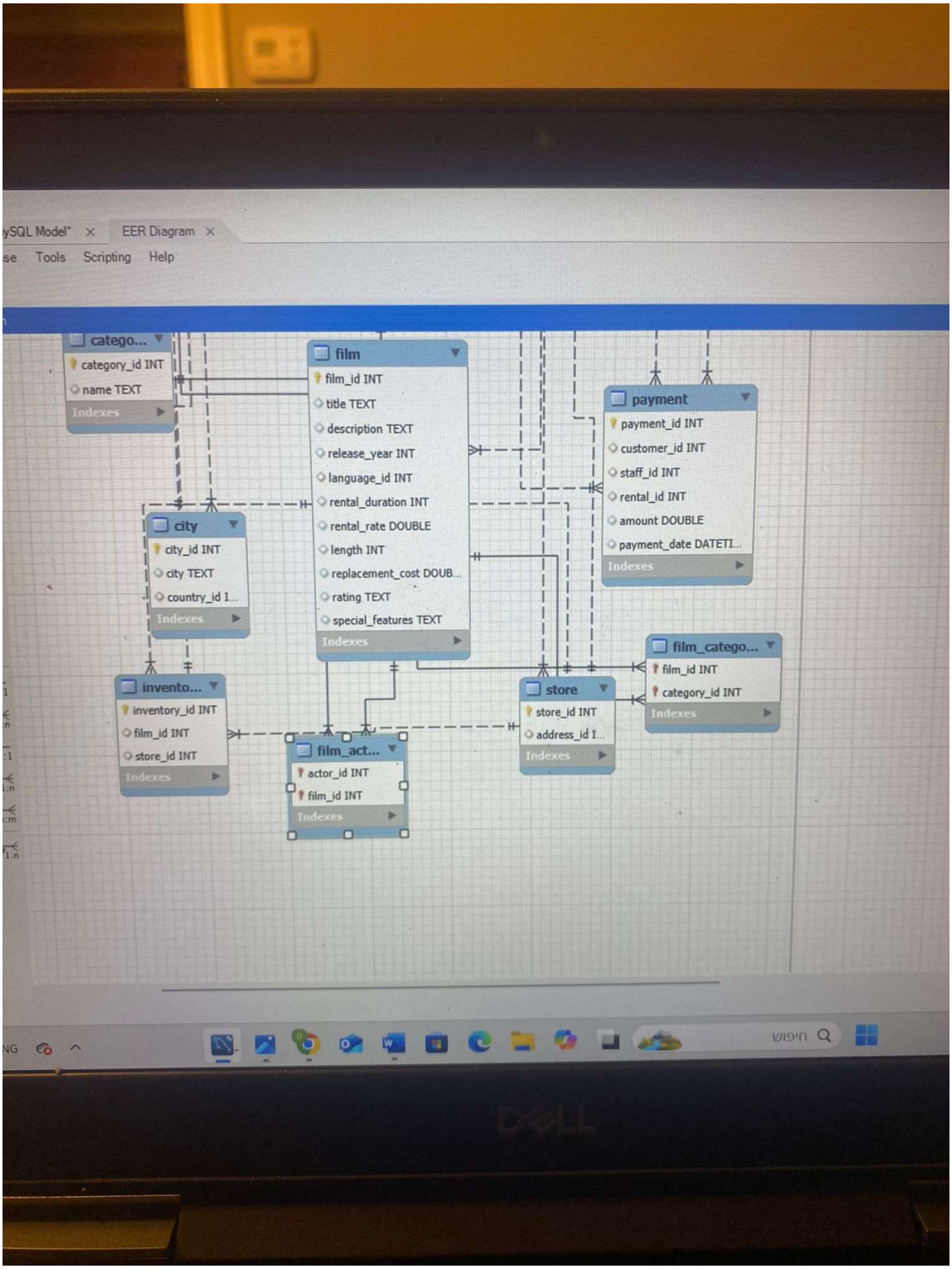
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EER Diagram
se Tools Scripting Help
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Indexes
חיפוש