1. Create a new column called “status” in the rental table (yes, add a permanent column) that uses a case statement to indicate if a film was returned late, early, or on time.
2. Show the total payment amounts for people who live in Kansas City or Saint Louis.
3. How many films are in each category? Why do you think there is a table for category and a table for film category?
4. Show a roster for the staff that includes their email, address, city, and country (not ids)
5. Show the film\_id, title, and length for the movies that were returned from May 15 to 31, 2005
6. Write a subquery to show which movies are rented below the average price for all movies.
7. Write a join statement to show which movies are rented below the average price for all movies.
8. Perform an explain plan on 6 and 7, and describe what you’re seeing and important ways they differ.
9. With a window function, write a query that shows the film, its duration, and what percentile the duration fits into. This may help <https://mode.com/sql-tutorial/sql-window-functions/#rank-and-dense_rank>
10. In under 100 words, explain what the difference is between set-based and procedural programming. Be sure to specify which sql and python are.

Bonus:

Find the relationship that is wrong in the data model. Explain why it’s wrong.