

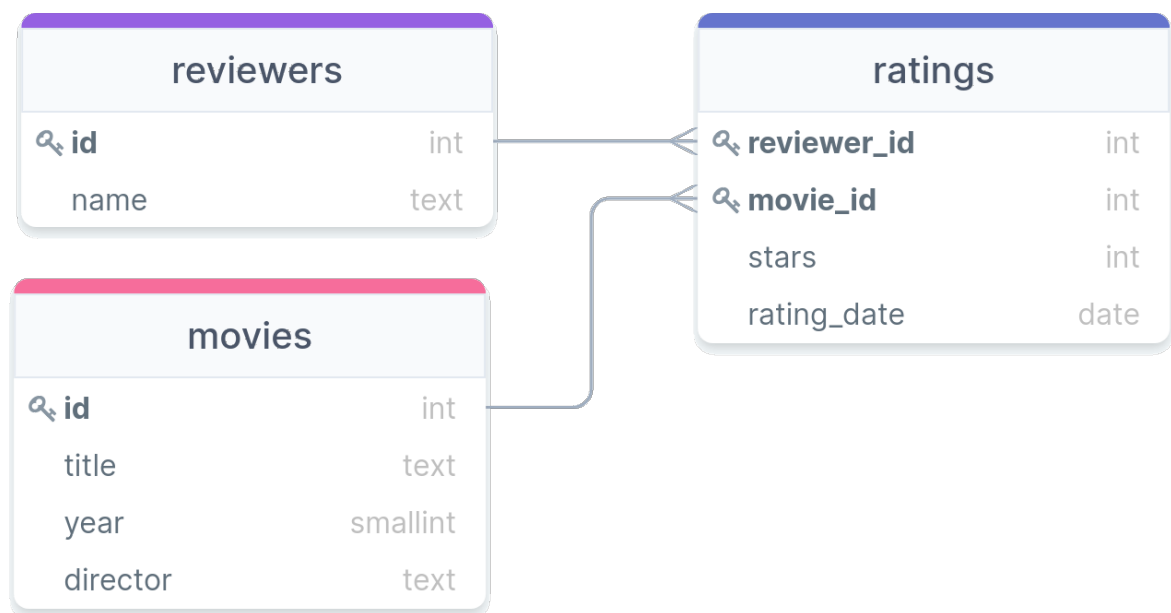
Just one problem this week, but it has a lot of small parts.

In the repository is a template to serve as a starting point for creating the necessary tables in the first part of this assignment. I've already included some queries at the top to create a new schema folder for this assignment and remove any tables that might be already existing. You will need to augment this starting point with the necessary column and constraint information, before checking your work against the other `.sql` files in the repository.

In order to accept the assignment and get access to the repository, you should follow the link here:

Assignment link: <https://classroom.github.com/a/drFAqi9C>

1. You'd like to set up some tables to keep track of some movies scores from a variety of reviewers. As such, you've sketched out a basic design shown in the below schematic:



The repository file `Prob1.sql` has the initial layout of these tables, in addition to defining a schema to place them into. Using this file as your starting point, you should add the necessary lines to create the correct columns and types for each table, *including primary and foreign keys*. Additionally, there are some further constraints that you would like to place on the data:

1. `(title,year)` in the `movies` table should be unique
2. `reviewers.name` should not be null
3. `ratings.stars` may not be null
4. `ratings.rating_date` may not be null
5. `movies.year` must be after the start of 1900
6. `ratings.stars` can only take on values of 1, 2, 3, 4 or 5
7. `ratings.rating_date` must come after the start of 2000

After adding your columns and constraints, you should be able to execute everything within `Prob1.sql` to create your necessary tables. To test that everything has gone well, you should then be able to run all the commands in `Prob1_Successes.sql` successfully, which should add rows to all of your tables without any errors. If an error occurs here, go back to your tables and determine what might have happened. Make sure your column names and types are just as indicated in the schematic.

Once all the commands in `Prob1_Successes.sql`, complete correctly, trying to run *any* command in `Prob1_Failures.sql` should result in an error owing to a constraint conflict of some sort. For each query (A-Q) in `Prob1_Failures.sql`, indicate specifically what constraint caused the operation to fail and why. Use plain English here to describe the constraint and situation, don't just regurgitate the error report that pops up! Realize that some queries will fail because of the same constraint, and some may have more than a single issue. If you think a query has multiple issues, consider trying to fix one and running it again to see if you still get an error. If there is not another error, so that your insert command succeeds, just remember to regenerate your tables (and successful inserts) so that the row you inadvertently added does not influence any future queries. If any of these queries completes successfully, then you've missed a constraint somewhere, so go back to your table creation and review the schematic and above constraints to see what you might have missed.

These ratings were all artificially generated for these mysterious reviewers, so if your favorite movie on the list didn't get an appropriate score, then I apologize!