CS 364: Assignment 03

For this assignment, you will be submitting a set of `.sql` files, one for each of the queries listed below. The queries work with the Chinook database, the same database you used for assignment 02. This assignment is worth **20 points**.

Queries

Construct the following queries, paying careful attention to the columns that should be displayed, their order, and their name. Each query should be written and then saved to a separate file; file names appear after the query descriptions below. After writing and running your query, you can save it by clicking the save button (or pressing Control + s on Windows, command + s on Mac); make sure you open a new query file for each query to avoid overwriting your previous query. This will bring up a save window to save your file with the extension `.sql`.

- List the names of playlists which have 700 or fewer songs of the 'Rock' genre on them, ordered from the fewest rock songs to the most. Your query should list the output columns as `Name` and `RockCount` in that order. (`query31.sql`)
- Find how much each customer spent on songs, ordered from the most spent to the least spent; if two or more people spent the same amount, they should be ordered by last name in alphabetical order (i.e., A-Z). Note that while there is a `Quantity` attribute for `InvoiceLine`, the quantity of every tuple is 1, such that quantity can be disregarded when planning your query. Your query should list the output columns as `FirstName`, `LastName`, `TotalSpent` in that order. Note that `TotalSpent` should be rounded to two decimal places; to achieve this, you can use the `round` function, which takes in a number and the the number of decimal places to round to. For example, using `round(1.618, 2)` in the a clause would produce the value 1.62. (`query32.sql`)
- List the 50-100 longest tracks, their lengths (in seconds; 1 second = 1000 ms), and the artists who sang them. Your query should list the output columns as `TrackName`, `ArtistName`, and `Seconds` in that order. (`query33.sql`)
- List all tracks that are longer than the most purchased track and their lengths (in seconds; 1 second = 1000 ms), ordered from shortest to longest. If there is a tie for most purchased track, use the longest (in milliseconds) most purchased track. Your query should list the output columns as `TrackName` and `Seconds` in that order. (`query34.sql`)
- List all artists who have five or more albums that are at least 2500000 milliseconds long. Your query should list the output columns as `ArtistName` and `NumAlbums`, in that order. (`query35.sql`)

Submission

All five of your `.sql` files must be named exactly as listed above. All five files should be placed in a folder named `cs364-assign03-<lastname>`, where `<lastname>` should be replaced with your last name in camelcase. For example, if your last name is "Von Neumann," your submission will be named `cs364-assign03-vonNeumann`. Your file should be zipped up and named `cs364-assign03-<lastname>`, then submitted to the Assignment 03 dropbox on Canvas. **Please be sure you are zipping a folder for submission, and not the individual files**. Your folder directory should look as follows:

`cs364-assign03-<lastname>` (folder)
- `query31.sql` (first query)
- `query32.sql` (second query)
- ...

Grading:

Your assignment will be graded on the correctness of queries (18 points), correct submission format (1 point)), and readability of queries (e.g., are keywords capitalized? is the query not indented in an unusual way? (1 point)). This assignment is worth 20 points.