

CS 364: Assignment 04

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 assignments 02 and 03. This assignment is worth **17 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`.

- Of artists who have sang 20 or more tracks, find those artists who have sang songs in two or more genres. Results should be ordered by the number of unique genres in descending order. If two or more artists are tied for the number of unique genres, they should be ordered in alphabetical order. Your query should list the output columns as `ArtistName` and `NumGenres` in that order. (`query41.sql`)
- List the average length of the albums sung by the artist who sang the album with the longest total length (e.g., if there are three songs on that album with millisecond lengths of 100, 250, and 150, the length of the album would be 500). In addition to the average length of the albums (this can be left in milliseconds), also include the name of the artist who sang those albums and the number of albums they sang. Your query should list the output columns as `ArtistName`, `NumAlbums` and `AvgAlbumLength` in that order. (`query42.sql`)

Submission

Both of your `.sql` files must be named exactly as listed above. Both files should be placed in a folder named `cs364-assign04-<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-assign04-vonNeumann`. Your file should be zipped up and named `cs364-assign04-<lastname>`, then submitted to the Assignment 04 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-assign04-<lastname> (folder)
  query41.sql (first query)
  query42.sql (second query)
  ...
```

Grading:

Your assignment will be graded on the correctness of queries (14 points), correct submission format (1 point), and readability of queries (e.g., are keywords capitalized? is the query not indented in an unusual way? (2 point)). This assignment is worth 17 points.