

# Assignment 03

CS 364 | Fall 2017

For this assignment, you will be submitting a set of `.sql` files, one for each of the queries listed below. This assignment uses the MySQL and the Chinook database from Assignment 02. Your assignment is due **October 25** at 11 PM.

## Queries

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 in the MySQL Workbench, you can save it by clicking the save button (or pressing Control + s on Windows, command + s on Mac). This will bring up a save window to save your file with the extension `.sql`.

- What is the length (in seconds) of all the tracks in the database? Note that you can perform mathematical operations on an attribute in the `SELECT` statement; this might be helpful to convert from millisecond to seconds. Your output column should be listed as `TotalTrackLength` in that order. (`query31.sql`)
- List all artists and the length (in seconds) of all of the tracks each artist sang, with output ordered by the longest amount of singing first. Your output columns should be listed as `ArtistName` and `TotalTrackLength` in that order. (`query32.sql`)
- What is the average length (in seconds) of an album? Note that this requires first finding the length of each album, and then finding the average length across albums. Your output column should be listed as `AverageAlbumLength` in that order. (`query33.sql`)
- List all artists and the number of unique composers that they had, only for those artists who had greater than zero composers. Note that there are some composer values that have `NULL` values; do not count these! Your output columns should be listed as `ArtistName` and `ComposerCount` in that order. (`query34.sql`)
- What songs which contain the word “The” appear in five or more playlists? Your output columns should be listed as `Name` and `NumAppearancesInPlaylist` in that order. (`query35.sql`)
- Purchases are affiliated with a country via the invoice. For each country, list how many times they purchased each album title. Results should be ordered such that the album that was most purchased (regardless of country) is first. In this case, that would be the USA, “The Office, Season 3”, and 14. Your output columns should be list as `Country`, `Title`, `PurchaseCount` in that order. (`query36.sql`)

## Submission

All six of your `.sql` files must be named exactly as listed above. All six 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 (or files, if you have an associated notes file) should be zipped up and named `cs364-assign03-<lastname>`, then submitted to the Assignment 02 dropbox on D2L. 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 correctness of queries, correct submission format, and readability of queries (e.g., are keywords capitalized? is the query not indented in an unusual way?).