CS1428 Lab FINAL Honors

# Name: Section:

1. (50 pts) For this section use any of the concepts we have covered this semester to solve the problem. (1 hour)

You are to write a program to manage a simple database of MP3s. The database will initially be stored in a file **mp3s.txt** and you are to read this file into a structure array in your program. You can define the structure however you like, but it must store the **title,** the artist, the album, the filename, and the size.

The file format will be of the form:

**Artist Album Title Size Filename**

**Artist Album Title Size Filename**

**Artist Album Title Size Filename**

Etc.

You must have a menu with at least the following options: list all songs, add a song, remove a song, change the artist/title/album of a song, calculate the total size taken up by all MP3s, and calculate the average MP3 size.

The program must use functions for all major processing.

After any operation modifies the list of songs, you are to re-display the list of songs.

When you display the list of songs it must be nicely formatted into a table. You may wish to utilize output formatting functions or write your own.

For extra points implement sorting and randomizing options (you can use qsort() ).

When the program quits, it writes the data back out to the file.

Name this program **lab12h.cpp**.

**I require a print out and an upload of this program to hwupload! Lack of either will result in a 0 for the programming portion. You have been warned!**