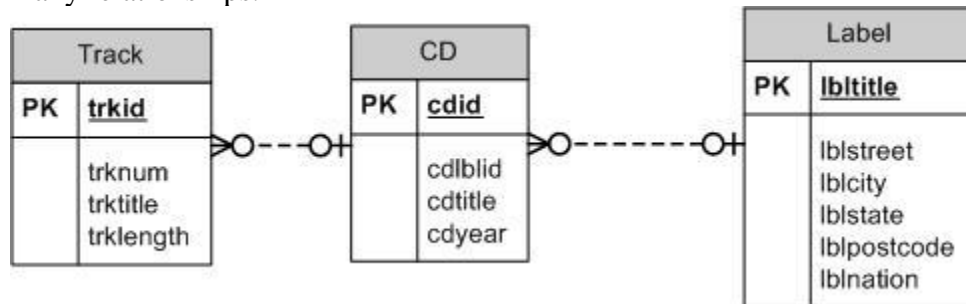


**CSCI 366 – Database and Web Dev**  
**Dr. Schwartz**  
**Lab 2**  
**100 pts**

Consider the Entity-Relationship diagram below. This was generated in Visio and the notation is a bit different than that of the slides, but the important thing to notice is the crow's feet showing the one-to-many relationships.



You're again going to turn in a .sql file for this lab. The template is available as a handout in AutoLab. You may use either adminer or MySQL Workbench, it's up to you. For Workbench, follow the directions on the the first lab handout to set up a connection.

- (15 pts) Write and execute SQL statements to create the tables described above. Remember that you will need foreign key constraints to capture the one-to-many relationships. You may need to drop your existing track table. You can refer to the [insert statements](http://www.cs.millersville.edu/~schwartz/466/Labs/Ch4CDinserts.txt) for more information on data types. The URL for the insert statements is: <http://www.cs.millersville.edu/~schwartz/466/Labs/Ch4CDinserts.txt>

**\*\*If you create the tables exactly as shown above, you can use the insert statements to populate the tables. Do not alter the insert statements. Use the same column names shown. \*\***

- (10 pts) Write a SQL query to list the tracks by CD title in order of track length. Include only columns trktitle, cdtitle and trklength.
- (10 pts) Write a SQL query to find the track title and track length for all of the tracks on the cd 'Swing'. **\*\* You must use a subquery rather than a join \*\*** Include only columns trktitle and trklength.
- (15 pts) Write a SQL query to find the cd title, track title and track length of the longest track on each CD. Include only columns cdtitle, trktitle and trklength.
- (10 pts) Write a SQL query to find the cd title, the number of tracks on each cd, and the total length for each cd. Show the cd with the most tracks first. Include only columns cdtitle, trkcount, and cdlength.
- (10 pts) Write a SQL query to find the label title, label nation, cd title and the total track length of all cds with a total track length longer than 40 minutes. Include only columns lbltitle, lblnation, cdtitle, and cdlength.
- (10 pts) Write a SQL query to find the cd title, track title and track length of the three shortest tracks in the track table. Show the track with the shortest length first. Note that you may want to use "limit" (look this up). Include only columns cdtitle, trktitle, and trklength.

8. (10 pts) Create a view that contains all of the information for a CD, including the total track length of all tracks on the CD. Call the view CDView. Columns should be named cdid, cdlbid, cdtitle, cdyear and cdlength.
9. (10 pts) Write a SQL query to list all track titles, the running times and the CD title of the tracks that start with 'C'. (You may use like or a regular expression). Include only columns trktitle, trklength and cdtitle.

Submission: Submit your lab to AutoLab.