

## SQL Constraints Lab - review

Start up SQLite and perform the following steps. You may find it easier to do your work in a text editor, and then paste into SQLite.

1. Start up SQLite and turn on foreign key constraint checking: `PRAGMA foreign_keys = ON;`
2. Create a table actor, with fields 'name' and 'birthyear'. Add an integer ID field that will be the primary key. Birthyear should be greater than 1800.
3. Insert Simon Pegg with ID 1 and birth year 1970, and then try to insert an actor into the actor table with ID 3, name 'Neil Old', and birthyear 1754.
4. Create another table 'movie', with fields title, year, and director. Use type varchar(30) for title and director, and integer for year. Define the primary key to be the attributes title and year. Include a check so that the year is greater than 1880.
5. Insert a movie into the movie table, with title 'Paul', year 2011, and directory 'Greg Mottola'.
6. Create another table 'appears', with fields actor\_ID, title, and year. Add a constraint so that the actor\_ID is the ID of an actor in the actor table, and so that title and year appear in some row of the movie table. The primary key should be the attributes actor\_ID, title, year.
7. Insert a row into the 'appears' table with actor\_ID = 1, title = 'Paul', and year = 2010 (NOT 2011).
8. The problem could be fixed by changing the year of the movie 'Paul' in the movie table to 2010, or by changing the insert statement to use 2011. The movie was actually 2011, so try the insert statement again, but this time with 2011.