

Homework 3

Databases

CS 98/198: Code the Change

Spring 2014

Due: Mar. 17, 2014, 6:00pm

Setup:

You can obtain a template for this assignment by forking the repo found at <https://github.com/ctcberkeley/ctc-hw3>.

Assignment:

For this assignment, you will be asked to write SQL commands that perform specific tasks. These queries will be stored in the text file found in the repo. Note that some of the commands required for this assignment weren't covered in lecture. The SQL tutorial listed on the website is a good place to start when you are unsure of how to do something.

Question #1:

Create a table called 'students' that allows for storage of a student's ID number (id), name (name), birthday (birth), GPA (gpa), and graduation year (grad). Make sure that all columns are of the correct type. Also, make sure to specify the student's ID number as the primary key (hint: check the tutorial).

Question #2:

Insert the following students into the table:

- Anderson, 1987-10-22, 3.9, 2014
- Jones, 1990-4-16, 2.4, 2016
- Hernandez, 1989-8-12, 3.1, 2015
- Chen, 1990-2-4, 3.2, 2015

Question #3:

Anderson is graduating and we no longer need to keep a record of him. Delete Anderson's record from the table.

Question #4:

Show all the contents of the table.

Question #5:

Show just the columns with the students' names and GPAs.

Question #6:

We want to know which student's made the honor roll. Show the names and GPAs of the

students that have a GPA above 3.0.

Question #7:

Show the names and GPAs of the students that have a GPA above 3.0, sorted in order from highest to lowest GPA (hint: check the tutorial).

Question #8:

Jones got better grades this semester. Change his GPA to 2.6.

Question #9:

The school has decided to shut down. Delete the entire 'students' table.