SQL HW 1

University of San Francisco HS 611

This assignment should solidify and test your knowledge with basic `SELECT` statements. Your answers should be written in a PDF document or plain text file, and should be numbered according to the problem numbers in this assignment. For those of you familiar with R, it is suggested that you use RMarkdown to knit a clean-looking PDF. For each problem, you are expected to write a single SQL query as your solution *and* on the next line copy and paste the output of that query. Only include the first FIVE lines of output for any queries that output more than five lines. For all problems, *only return the information and columns requested* and only use SQL commands shown in class. Every query should produce at minimum one column.

1. Using the table `cmspop`, write a query that finds the following:

    a. All rows where the claim is in California and the patient is a caucasian female.
    b. The number of claims in Washington where the patient is male.
    c. The claims where `id` contains either "000" or "34".
    d. The first-born person in Florida that is deceased (you can ignore the fact that more than one person might be born on the same day).

2. Using the table `cmsclaims`, write a query that does the following:

    a. Calculates the ratio of carrier reimbursement to beneficiary responsibility in descending order.
    b. Finds the amount of greatest beneficiary responsibility.
    c. Finds the five records with the largest ratio of beneficiary responsibility to carrier reimbursement (note: this ratio is different than in sub-problem *a*) where the number of HMO months is 4. Return columns with the `id`, `hmo_mo`, and the ratio.
    d. Counts the number of unique claim IDs for which the beneficiary was not financially responsible. Assume claim IDs in the data can contain duplicates.
    e. Finds the average difference between carrier reimbursement and beneficiary responsibility.