HST 952 Fall 2002

Homework 9

The first part of this assignment is from Chapter 5, Page 203, Problems and Exercises

1. Problem 1, parts c, d, f, g (**28 points**)
2. Problem 3 (**12 points**)
3. Problem 4 (**10 points**)

For item 2 (Problem 3) please show the intermediate steps, if any, in the normalization process

The second part of this assignment builds upon the relational model and database you created in Homework 8. To complete the assignment you have to enter the enclosed sample data into your database. You can use the IBQuery tool or whatever means you prefer to enter data into the database. If your schema does not support entering the sample data, consider altering your schema.

Write queries in SQL to support the following scenarios (items 7-11). Some scenarios will require a sequence of queries. You can develop and test your queries using IBQuery. You must generate the SQL manually. Use of QBE tools or other means of machine-generating SQL using CASE tools or graphical tools is not allowed for this assignment (**25 points**).

4. Dr. James Jones enters an order for Ms. Pied Piper, a female born on 25th of August, 1943. He orders a complete blood count (this test consists of RBC Count, WBC Count, and Blood Hemoglobin), serum FT4, and serum TSH. Ms. Piper has no record in the database currently.
5. Dr. Bean Counter, Director of Utilization Review, wants to find out the number of Serum Potassium tests ordered by Dr. Spencer Lott during this calendar year.
6. The Cell-Counter Ultra-Super Auto-Analyzer would like to store the test results for Ms. Pied Piper ordered in Item 7 above. (Make numbers up for the test results).
7. Dr. James Jones views the test results for Ms. Pied Piper recorded in Item 9.
8. Dr. Bean Counter reviews all the alerts sent out at the end of each month. Create a view to support his need. The view must display the name of the physician to whom the alert was sent, the name and ID of the patient, the test result for which the alert was sent, the alert thresholds, the time the test was performed, the time the alert was sent. Send me the results of the view for the month of July 2001.
9. Write Java programs that will execute the above queries using JDBC and print results (if any) in a file (**25 points**).

Please send me all your queries, java source code, and output after running the queries.

Hint: It is your responsibility to make sure that I can understand your programs by using good documentation, proper formatting, and use of intuitive names in your source files.