FE 513 Practical Aspects of Database Design

Assignment III

Please complete the assignment using PostgreSQL and submit the SQL script. Also please provide a pdf report summary your results and codes together. It's a good way to write your report in the manner **(1)briefly stating what are you doing for each question(one sentence is enough), (2) your PostgreSQL codes, (3) and result(snapshot are accepted) if it's not trivial to show.**

1 Querying Multiple Tables (50pt)

1. Import data from banks_sec_2002 and banks_al_2002. Delete duplicate rows from banks_sec_2002

2. Select proper join manner to join banks_sec_2002 and banks_al_2002. Make sure that all data from banks_sec_2002 are kept in the joint table. Report the first 10 observations.

3. Create a new table banks_total. Insert the values from previous joint table into this new one. And set a primary key for the table.

4. For each quarter of the year 2002 count how many banks have security over 20% of its' asset.

5. How many banks have liability over 90% of assets in first quarter of 2002 but goes below 90% in the second quarter of 2002.

6. Export the joint table (banks_total) to a csv file.

2 PostgreSQL API in R (50pt)

Complete following tasks in R using PostgreSQL API:

1. Make a connection to your local PostgreSQL database using API.

2. Import the csv file you got from Problem 1 (banks_total) into a new table in the database using API. (Hint. Please give the table a new name if table 'banks_total' exists in the database)

3. Retrieve the data of table 'banks_total' using API. Count how many rows in the table.