Database Systems: a Pragmatic Approach

Sample Assignment 8

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For each question, show the SQL statement(s) that you have used in order to address the question.

Create a test table called **JonesB TestTable** (where "JonesB" represents your user name) and populate it with some sample data. [10] 2. 2a. Create a role and for its name, use the concatenation of your user account and the word "Role". For instance, the role may be called **JonesB Role** (where "JonesB" represents your user name). [02] Grant to your role the system privileges that facilitate application development (see section 13.2.2 of your lecture notes). [11] Grant to your role, SUDI privileges on **JonesB TestTable** (see section 13.2.3 of lecture notes for SUDI privileges). [04] 2c. 2d. There is a catalog table that you can access to see all the system privileges granted to all roles in the system. Its name is Role Sys Privs. Study its structure, and then issue an appropriate SQL statement to display the system privileges associated with your role. Show the SQL statement used. [06] 3. Create a test user account called **JonesB_User** (where "JonesB" represents your user name). Assign the user to your tablespace; also use a password that you will remember. Your current tablespace name is TBS JonesB (where "JonesB" represents your user name); you can determine this by observing the catalog view **User Users**. [04] Try logging on to the database as **JonesB_User**. Record the result of your attempt, and provide an explanation for this observation. [04] 3c. Log on with your normal user account and grant your test role (Jones B Role created in 2a) to your test user Jones B User. [02] 3d. Try logging on as JonesB_User once more and record the result of your attempt. Provide an explanation for this observation. [04]

3e. Log on as JonesB_User and try running a query on your test table. To do this, you must either create synonym for JonesB_TestTable in the schema of JonesB_User, and then run the query on the synonym, or you must qualify the table name when you run the query on JonesB_TestTable. Record the result of your attempt, and explain why you obtained that result. [10]

3f. Switch to your normal user account and revoke the SUDI privileges on **JonesB TestTable** from your role. [04]

3g. Log on as **JonesB_User** again and try running a query on your **JonesB_TestTable**. Record the result of your attempt. Provide an explanation for this result. [06]

4.
Study your music database that you created for the previous assignment, and reflect on what you have learned about the system catalog. Write SQL statements to show what the contents of the system catalog views USER_TABLES (attributes Table_Name and Tablespace_Name) and USER_TAB_COLUMNS (attributes Column_Name and Table_Name) would be. Include a screen shot of the query results.

Total Possible Points: 77