COURSE: DATABASES

ASSIGNMENT 7

SQL FUNDAMENTALS

SUBQUERIES

SQL SERVER MANAGEMENT STUDIO

Theory part:

Subqueries using SQL.

Practical part:

This is the second in a series of three exercises. You will go through the fundamentals of Structured Query Syntax. Starting from simple ones and going into ones that are more complex.

First, create the database DREAMHOME. You have to have good enough database in order to be able to practice SQL query commands. This database will be used also in the future assignment (with the next one).

Use the scripts provided in the Moodle to create the tables and add the meaningful information to all the tables. Be sure that no errors take place when you use the scripts.

Create the needed SQL Statements. In your word document, include your statements and what you received from your database as a result table.

1. Find the branch where Ann works. Include at least columns Street and City from Branch table. If you want to include column FirstName from Staff table, you need to use JOIN operation.

2. List the Staff who work in the branch at ’32 Manse Road’… and only those whose position is ‘Assistant’ in that same branch. Include at least columns FirstName and FamilyName from Staff table. If you want to include column Street information from Branch table, you need to use JOIN operation.

3. Find the owner of the property for rent at address ‘Slippery Lane 16’. Include at least columns FirstName and FamilyName from PrivateOwner table. If you want to include column Street information from PropertyForRent table, you need to use JOIN operation.

4. List the names of all clients who have viewed a property at 15th of June. Include at least columns FirstName and FamilyName from Client table. If you want to include column ViewDate information from Viewing table, you need to use JOIN operation. Using JOIN needs also keyword DISTINCT.

5. List the names of all clients who have viewed a property at 15th of June or at 16th of June. Include at least columns FirstName and FamilyName from Client table. If you want to include column ViewDate information from Viewing table, you need to use JOIN. If you choose to use DATEPART() function (for some personal reason) your query may become a lengthy one. If you choose to use JOIN operation you may need to add DISTINCT keyword.

6. List the name of all clients who has viewed a property at 15th of June and who did not give any comments. Include at least columns FirstName and FamilyName from Client table. If you want to include column ViewDate information from Viewing table, you need to use JOIN operation.

7. Find the name of a staff member who manages property for rent at ‘8 Naval Drive’. Include at least columns FirstName and FamilyName from Staff table. If you want to include column Street information from PropertyForRent table, you need to use JOIN operation.

8. Find the names of all clients who have viewed Flats. Include at least columns FirstName and FamilyName from Client table. If you want to include TypeOfProperty information from PropertyForRent table, you need to use JOIN operation.

9. Something interesting unsolved (in the area of substrings)? What if anything?

Build one Word document where you copy and paste all the source code (from the final solution) you have generated during solving the task. Your word document should also show the functional details of the solution. One generic example from functional details: if the task is to make some calculations with the user input, use print screens to show one successful use case where the input is received and calculations will be completed. Your document need not be a complete road map from each individual step, but it should still be understandable and show street credibility to the outside reader. Use exactly the same format you would use with the thesis document (not description sheet, please!), or alternatively use the shorter report template. You can find the instructions from the student intranet.

Theory part can be at the beginning of or at the end of your word document where you have your **Practical part**. Remember to add all the references used in your document!

Take your script files together with your Word file and zip it into one file. Return that composite zip file to Moodle.

Assessment: Half from the points come from **Theory part**, another half from **Practical part**.

Submit your task before deadline! It is not possible to return this task after the deadline.