Lab 6

Due Nov 17, 2020 by 11:59pm **Points** 10 **Submitting** a file upload **File Types** sql
Available until Dec 16, 2020 at 11:59pm

This assignment was locked Dec 16, 2020 at 11:59pm.

Labs 4 to 7 are SQL scripts; if they do not run in their entirety without error, they will be graded 0.

Statement of Authorship

- Lab to be done individually
- In order to be graded, the following Statement of Authorship must be present at the beginning of the script
- I, Firstname Lastname, student number 123456789, certify that this material is my original work. No other person's work has been used without due acknowledgment and I have not made my work available to anyone else.
- Replace Firstname Lastname with your name and 123456789 with your student number

Introduction

- Start SQL Server and SQL Server Management Studio, see **lab 0** for instructions on how to use SQL Server and SSMS
- Use your script from lab 4 (co859.sql) as the starting point, make a copy of it
- In SQL Server Management Studio, change output to text (Query menu / Results To / Results to Text); this will allow the PRINT statements to appear in the results
- Add the new code to the end of the script
- Ensure the comment heading block has the following:
  - Script name
  - Your name
  - Date
  - Description
- **Statement of authorship must be present and updated with your name and student number, or your work will not be graded**

Overview

In this lab you will modify the structure of your master table, add some new data and create a stored procedure. The procedure will be applied to the tables you created in lab 4. In addition, you will submit a number of test cases. You will prove that the procedure works by showing the state of the database before and after it runs.

Procedure

Businesses don't always hang on to data indefinitely. Sometimes there can be a need to determine which rows to purge from a table. In the case of a customer table, the criteria might be no activity for the last three years.

- The ALTER TABLE command allows changes to the structure of an existing table. Investigate the syntax of the ALTER TABLE command in the online help; the first example is adding a new column. You will alter your master table to give it an additional column, named last_activity_date (type DATE), ensure that this column will accept NULL values.
- Use UPDATE statements to provide values for last_activity_date for each of your master records. Ensure that the last_activity_date for each record is different and within the last 2 years.
- Insert a new record into your master table and ensure that the last_activity_date is more than 3 years ago. Do not insert any accompanying records into the sales table.
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- Write a procedure named purge_<master>
  - Where <master> is customer, item or services
  - Procedure accepts two parameters
    - @cut_off_date, DATE
    - @update, INT, default value of 0
  - If @update is 1
    - Delete any records from the master table where last_activity_date is before @cut_off_date
  - If @update is not 1
    - Print the message "Record(s) that would be deleted"
    - Show the records from the master table that would be deleted
  - This procedure does not require a cursor
  - Add a GO statement after the procedure is created or SQL Server will incorrectly interpret the remaining code as part of the procedure

Verify Procedure Works

Add the following code to your script and complete it. This will test the stored procedure.

```
-- Verification
PRINT 'Verify procedure'
PRINT 'Master Table Before Changes'
SELECT all rows and columns from the master table
Execute procedure passing a date 3 years ago from today
PRINT 'After 1st Call To Procedure'
SELECT all rows and columns from the master table
Execute procedure passing a date 3 years ago from today and 1 for @Update
PRINT 'After 2nd Call To Procedure'
SELECT all rows and columns from the master table
```

Marks will be deducted if:

- Comment block is incomplete or incorrect
- Database created is not named co859
- Any of the SQL statements are not identified with a comment
- Any of the SELECTs are not identified with PRINT statements
- Any necessary GO statements missing

Lab 6

Criteria	Ratings			Pts
ALTER TABLE	**2 pts** **Full Marks**	**1 pts** **Partial Marks**	**0 pts** **No Marks**	2 pts
Master table UPDATEs	**1 pts** **Full Marks**	**0.5 pts** **Partial Marks**	**0 pts** **No Marks**	1 pts
Master table INSERT	**1 pts** **Full Marks**	**0.5 pts** **Partial Marks**	**0 pts** **No Marks**	1 pts
Stored procedure	**3 pts** **Full Marks**	**1.5 pts** **Partial Marks**	**0 pts** **No Marks**	3 pts
Output of master table before all changes	**1 pts** **Full Marks**	**0.5 pts** **Partial Marks**	**0 pts** **No Marks**	1 pts
Output of master table after 1st call to procedure	**1 pts** **Full Marks**	**0.5 pts** **Partial Marks**	**0 pts** **No Marks**	1 pts
Output of master table after 2nd call to procedure	**1 pts** **Full Marks**	**0.5 pts** **Partial Marks**	**0 pts** **No Marks**	1 pts
				Total Points: 10