Unit 13 Instructions - Transactions and locking Introduction to Enterprise Relational Databases

Instructions

Read these instructions all the way through before you start.

Download the answer document. Be sure to put your name at the top of the answer document where that's indicated. Answer the questions below in that document and when you are done, upload it into Blackboard.

Overview

In this unit you'll get a feel on how to create and use stored procedures and user functions.

Preparing your SQL

Make sure you include the comment and USE statement at the top of your SQL

```
-- Unit 13 - Transactions
-- 13.1 - Demonstrate transaction failure with ROLLBACK
USE College;
```

and don't forget to beautify your SQL, by hand if needed. In your screen shot of the Result Grid you need to show only first 6-10 rows. If you're not sure about these, see Unit 02 instruction for details on how to do that.

Steps

Before you begin and after each change, be sure to run the CollegeCreate.sql script to reset the database.

1. [10] The Information Technology department hired a new professor named Eduardo Egghead at a salary of \$115,000. Unfortunately, a clerk in Human Resources accidently set him up as a student instead of a faculty member and then registered him for a section. Your job is to clean up this mess. You'll do that in this step and in the next step.

Create a stored procedure named Fix_Egghead1. In the procedure, write a series of SQL statements <u>inside a transaction</u> that attempts to

- 1. Delete Egghead's Student record and
- 2. Create a record for him in the Faculty table.

This will fail because Egghead has a registration record and that will prevent you from deleting his Student record. When it fails, rollback the transaction, displaying a message that it's been rolled back and include the technical error message.

When you take your screenshot of the Output window to show the results, be sure to widen the field so I can see the entire error message.

2. [10] For this step, write a series of SQL statements <u>inside a transaction</u> that attempts to delete Egghead's Student record and create a record for him in the Faculty table. Delete any registration records for Egghead before you delete his Student record. This will succeed and when it does, commit the transaction, displaying a message that it's been committed.