Chapter 15
How to code stored procedures

Exercises

1. Write a script that creates a stored procedure named spStudentUnits that calculates the total course units for a student in each semester. The sp should accept one parameter for the student ID and return a recordset.
2. Write a script that creates a stored procedure named spCoursestaught that returns a list of all courses that are taught for a specific instructor. The sp should accept one optional parameter for the InstructorID and return a recordset of the courses taught by that instructor. If no ID is provided return the result for all the instructors.
3. Write a script that creates a stored procedure named spInsertDepartment. The procedure should accept one parameter for a department name, which it uses to add a new row to the Departments table.

   In the same script, code two EXEC statements to test the new procedure. One should succeed and one should fail. (Hint: Note that the Departments table doesn't allow duplicate department names.)
4. Write a script that creates a stored procedure named spInsertInstructor that inserts a row into the Instructors table. This stored procedure should accept a parameter for each of these columns: LastName, FirstName, Status, DepartmentChairman, AnnualSalary, and DepartmentID.

   This stored procedure should set the DateAdded column to the current date.

   If the value for the AnnualSalary column is a negative number, the stored procedure should raise an error that indicates that this column doesn't accept negative numbers.

   Code two EXEC statements that test this procedure, one that succeeds and one that fails.
5. Write a script that creates and calls a stored procedure named spUpdateInstructor that updates the AnnualSalary column in the Instructors table. This procedure should have two parameters, one for the instructor ID and another for the annual salary.

   If the value for the AnnualSalary column is a negative number, the stored procedure should raise an error that indicates that the value for this column must be a positive number.

   Code two EXEC statements that test this procedure, one that succeeds and one that fails.