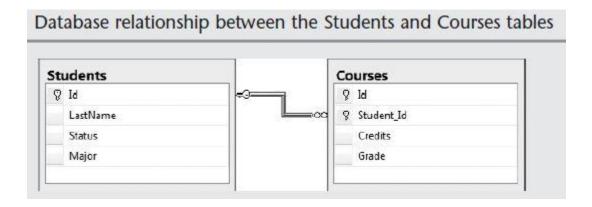**Students and Course Lists**

In this programming challenge, you will use LINQ statements to display college courses taken by selected students. You will use a *CourseRegistration* database, which contains tables named *Students* and *Courses*.

• The **Students** table contains the following columns: Id (smallint, primary key), Last-Name (varchar(30)), Status (smallint), and Major (varchar(5)).

• The **Courses** table contains the following columns: Id (varchar(10)), Student_Id(smallint), Credits (smallint), and Grade (float). The primary key of the Courses table consists of two combined columns: Id and Student_Id.

There is a one-to-many relationship between the Students and Courses tables.

Use a LINQ query to fill a DataGridView with a list of Student objects. When the user selects a student in the grid, display all courses taken by the student in a separate grid. Use another LINQ query to fill the second grid.

The grid on the right fills with the list of courses taken by the selected student. Notice that the rightmost column in the Student grid displays a count of the number of courses the student has taken. This column was not in the database, but it is calculated by the LINQ query.

The two DataGridView controls should be inserted into panels belonging to a Split-Container control. At runtime, the user will drag the divider between the two panels to adjust their size.

Database relationship between the Students and Courses tables

List of Students