**Study - Student Grade Management System**

1. **Project Goals:**
   * Description of the key objectives of the Student Grade Management System:
     + Store student information, course details, and grades.
     + Perform various data operations using LINQ queries.
     + Provide reports and statistics on student performance.
2. **Data Model:**
   * Design of the data model, including Student, Course, and Grade classes.
   * Defining relationships between classes using associations.
3. **Data Initialization:**
   * Setting up initial data for students, courses, and grades for testing purposes.
   * Using collection initializers to populate data in memory.
4. **LINQ Query Operations:**
   * Implementing LINQ queries for various data operations:
     + Fetching student information based on specific criteria (e.g., ID, name).
     + Retrieving courses and grades for a particular student.
     + Calculating average grades and GPA for individual students and courses.
     + Finding the top-performing students and courses.