**University Management System**

You have been hired by a university to develop a **University Management System**. The system will help manage students, courses, teachers, departments, and grades efficiently. The focus of the system is to maintain relationships between these entities and support querying essential data.

### ****Database Design****

#### 1. **Entities and Attributes**

1. **Student**:
   * StudentId (Primary Key)
   * FirstName
   * LastName
   * Email
2. **Course**:
   * CourseId (Primary Key)
   * CourseName
   * Credits
   * TeacherId (Foreign Key)
3. **Teacher**:
   * TeacherId (Primary Key)
   * Name
   * DepartmentId (Foreign Key)
4. **Department**:
   * DepartmentId (Primary Key)
   * DepartmentName
5. **Enrollment**:
   * EnrollmentId (Primary Key)
   * StudentId (Foreign Key)
   * CourseId (Foreign Key)
   * GradeId (Foreign Key)
6. **Grade**:
   * GradeId (Primary Key)
   * GradeName

#### 2. **Relationships**

1. **One-to-Many**:
   * A **Department** can have multiple **Teachers**, but each **Teacher** belongs to one **Department**.
   * A **Teacher** can teach multiple **Courses**, but each **Course** is taught by one **Teacher**.
2. **Many-to-Many**:
   * Students can enroll in multiple **Courses**, and each **Course** can have multiple **Students**. This is implemented using the **Enrollment** entity.
3. **One-to-One**:
   * Each **Enrollment** can have exactly one **Grade** assigned, and a **Grade** is linked to only one **Enrollment**.