// Define custom object for Students

Schema.SObjectType studentObject = Schema.getGlobalDescribe().get('Student\_\_c');

if (studentObject == null) {

Schema.SObjectField studentName = new Schema.SObjectField('Name', Schema.DisplayType.String);

Schema.SObjectField studentDOB = new Schema.SObjectField('Date\_of\_Birth\_\_c', Schema.DisplayType.Date);

Schema.SObjectField studentGrade = new Schema.SObjectField('Grade\_\_c', Schema.DisplayType.String);

Schema.SObjectField studentCourses = new Schema.SObjectField('Courses\_\_c', Schema.DisplayType.Relationship);

Schema.DescribeSObjectResult studentDescribe = studentObject.getDescribe();

// Create custom object for Students if it doesn't exist

studentObject = new Schema.SObjectType('Student\_\_c');

studentObject.addField(studentName);

studentObject.addField(studentDOB);

studentObject.addField(studentGrade);

studentObject.addField(studentCourses);

Schema.SObjectType studentObjectType = Schema.getGlobalDescribe().put('Student\_\_c', studentObject);

// Create a custom field for student-course relationship

Schema.SObjectField studentCourse = new Schema.SObjectField('Student\_\_c', Schema.DisplayType.Reference);

studentCourse.setReferenceTo(new List<String> { 'Course\_\_c' });

}

// Define custom object for Courses

Schema.SObjectType courseObject = Schema.getGlobalDescribe().get('Course\_\_c');

if (courseObject == null) {

Schema.SObjectField courseName = new Schema.SObjectField('Name', Schema.DisplayType.String);

Schema.SObjectField courseDescription = new Schema.SObjectField('Description\_\_c', Schema.DisplayType.Text);

Schema.DescribeSObjectResult courseDescribe = courseObject.getDescribe();

// Create custom object for Courses if it doesn't exist

courseObject = new Schema.SObjectType('Course\_\_c');

courseObject.addField(courseName);

courseObject.addField(courseDescription);

Schema.SObjectType courseObjectType = Schema.getGlobalDescribe().put('Course\_\_c', courseObject);

}

// Create a custom relationship field between Students and Courses

Schema.SObjectField studentCoursesField = studentObject.fields.getMap().get('Courses\_\_c');

studentCoursesField.setType('MasterDetail');

studentCoursesField.setRelationship('Student\_\_c.Course\_\_c');