



Chapter 05

- 1 Build a Database**
- 2 Create a Stored Procedure**
- 3 Create a Models**



Build a Database

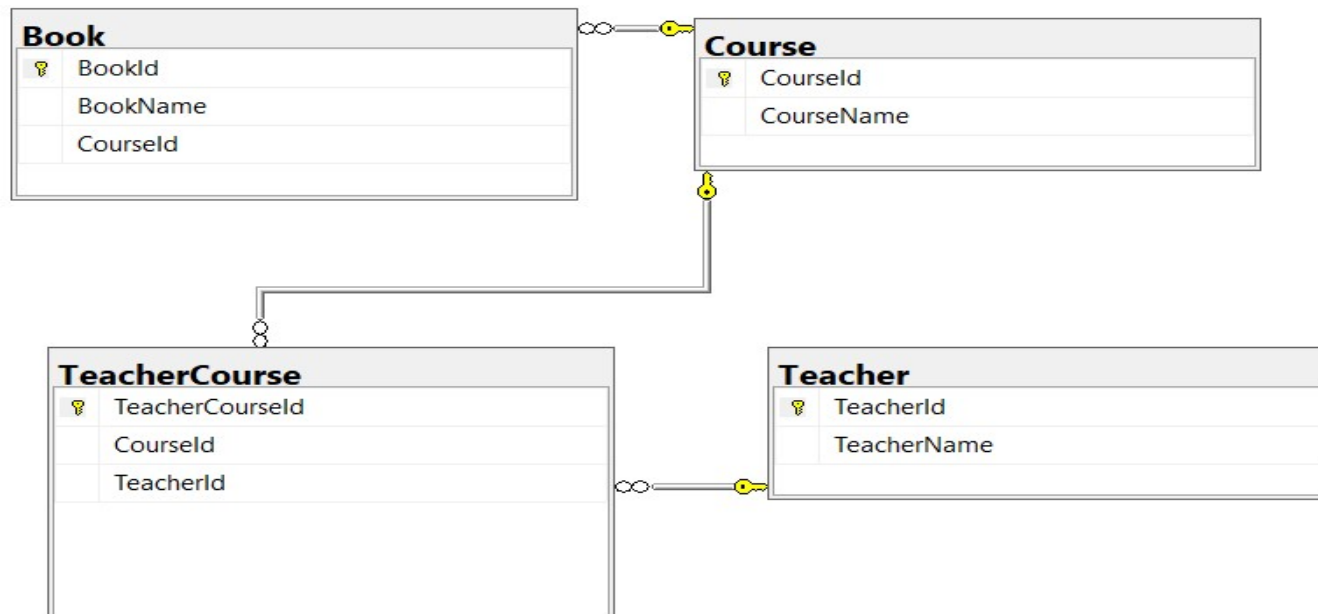
Exercise 1:

Draw a Learn Database, Course teach by books and many teachers teach courses.



Build a Database

Exercise Solution:





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Create a Stored Procedure

Exercise 2:

Write a Stored Procedure for all tables.



Create a Stored Procedure

Exercise Solution:

```
CREATE PROCEDURE [dbo].[InsertBook]
@Id int,
@Name varchar(50), @CourseID int
AS
INSERT INTO Book(BookId, BookName,
CourseId)
VALUES (@Id,@Name, @CourseID)
```



Create a Stored Procedure

```
CREATE PROCEDURE [dbo].[UpdateBook] @Id int,  
@Name varchar(50),  
@CourseID int AS  
BEGIN UPDATE Book  
SET BookName=@Name, CourseId= @CourseID WHERE  
BookId =@Id  
END
```



Create a Stored Procedure

```
CREATE PROCEDURE [dbo].[DeleteBook]
@Id int
AS
DELETE Book
WHERE BookId = @Id
```



Create a Stored Procedure

```
CREATE PROCEDURE  
[dbo].[GetAllBook] AS  
BEGIN  
SELECT * FROM Book  
END
```



Create a Stored Procedure

```
CREATE PROCEDURE
[dbo].[InsertTeacher]  @Id int,
@Name varchar(50)
AS
INSERT INTO Teacher(TeacherId, TeacherName)
VALUES (@Id,@Name)
```



Create a Stored Procedure

```
CREATE PROCEDURE [dbo].[UpdateTeacher]
@Id int,
@Name varchar(50)
AS
BEGIN
UPDATE Teacher
SET TeacherName=@Name
WHERE TeacherId =@Id
END
```



Create a Stored Procedure

```
CREATE PROCEDURE [dbo].[DeleteTeacher]
@Id int
AS
DELETE Teacher
WHERE TeacherId = @Id
```



Create a Stored Procedure

```
CREATE PROCEDURE [dbo].[GetAllTeacher]
AS
BEGIN
SELECT * FROM Teacher END
```



Create a Stored Procedure

```
CREATE PROCEDURE [dbo].[InsertTeacherCourse]
@TeacherCourseID int,
@TeacherID int,
@CourseID int
AS
INSERT INTO TeacherCourse(TeacherCourseId,TeacherId,
CourseId)
VALUES (@TeacherCourseID,@TeacherID,@CourseID)
```



Create a Stored Procedure

```
CREATE PROCEDURE [dbo].[UpdateTeacherCourse]
@TeacherCourseID int,
@TeacherID int,
@CourseID int
AS
BEGIN
UPDATE TeacherCourse
SET TeacherId=@TeacherID, CourseId =@CourseID
WHERE TeacherCourseId =@TeacherCourseID
END
```



Create a Stored Procedure

```
CREATE PROCEDURE [dbo].[DeleteTeacherCourse]
@Id int
AS
DELETE TeacherCourse
WHERE TeacherCourseId = @Id
```





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Create a Models

Exercise 3:

Create a classes for all tables with relationships.



Create a Models

Exercise Solution:

```
public class Book
{
    public int BookId { get; set; } public
    string BookName { get; set; }
    [Display(Name = "Course")]
    public int CourseId { get; set; }

    [ForeignKey("CourseId")]
    public virtual Course Course { get; set; }
}
```



Create a Models

```
public class Course
{
    public int CourseId { get; set; }
    public string CourseName { get; set; }

    public ICollection<Book> books { get; set; }
    public ICollection<TeacherCourse> TeacherCourses
    {
        get; set;
    }
}
```



Create a Models

```
public class Teacher
{
    public int TeacherId { get; set; }
    public string TeacherName { get; set; }
    public ICollection<TeacherCourse> TeacherCourses
    { get; set; }
}
```



Create a Models

```
public class TeacherCourse
{
    public int TeacherCourseId { get; set; }
    [Display(Name = "Course")]
    public int CourseId { get; set; }

    [ForeignKey("CourseId")]
    public virtual Course Course { get; set; }
    [Display(Name = "Teacher")]
    public int TeacherId { get; set; }

    [ForeignKey("TeacherId")]
    public virtual Teacher Teacher { get; set; }
}
```



References

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