

### Q3 - Tables after normalization

#### Student

Id (PK)	Name	Phone
00012	John Smith	902-5556
00014	Raj Sharma	902-8596
00015	Lee Wang	902-7845
00016	Anan Obj	902-8974

#### Course

Id (PK)	Name
001	Mathematics
002	Physics
003	Chemistry

#### StudentCoursePoints

CourseId (PK) (FK Course Id)	StudentId (PK) (FK Student Id)	Points
001	00012	86
001	00014	75
001	00016	96
002	00015	92
002	00012	63
002	00016	58
002	00014	78
003	00014	83
003	00015	65
003	00012	95

In case we need to allow multiple entries for same student and course in the points table to get the average points for each student

There will be no composite primary key in StudentCoursePoints table

### **Avg Point Query**

```
SELECT s.Name As 'name' , SUBSTRING(c.Name,1, 4) As 'course',  
cast(AVG(scp.points) as decimal(10,4)) AS 'avg(points)'  
FROM StudentCoursePoints as scp  
Join Course As c ON c.Id = scp.CourseId  
Join Student As s ON s.Id = scp.StudentId  
Group By s.Name,c.Name  
Order By s.Name;
```