

1)PK = (StudentID, CourseID, InstructorID, TimeSlot, Room)

2) 1. StudentID → StudentMajor

2. CourseID → CourseName

3. InstructorID → InstructorName

4. (Room, TimeSlot) → Building

5. (CourseID, InstructorID, TimeSlot, Room) →
defines a course section

6. (StudentID, CourseID, InstructorID, TimeSlot, Room) → all attributes (by PK)

3) The table is not in BCNF because there are functional dependencies where the left-hand side (determinant) is not a superkey.

5) There is no loss of information after decomposition.

All original data can be reconstructed by joining the tables.

4)

Students
StudentID
StudentMajor

Instructors
InstructorID
InstructorName

Courses
CourseID
CourseName
<i>InstructorID</i>
TimeSlot
Room
Building

Rooms
Room
Building

Enrollments
StudentID
CourseID