CS 157A

Hands on 3

Start with a table containing StudentID, StudentName, CourseID, CourseName, and InstructorName. Identify functional dependencies and decompose the relation to be in BCNF.

StudentID	StudentName	CourseID	CourseName	InstructorName
1	Alice	CSE101	Data Structures	Prof. Ryan
2	Bob	CSE102	DBMS	Prof. Smith
3	Carol	CSE101	Data Structures	Prof. Ryan
4	David	CSE103	OS	Prof. Johnson
5	Eve	CSE102	DBMS	Prof. Smith

StudentID $\Rightarrow$ StudentName

CourseID $\Rightarrow$ CourseName, Instructor Name

To become BCNF where all non primary attributes depend on the key, whole key, & nothing but the key are yes

2 tables

StudentID | Student name

& CourseID | Course Name | Instructor

Relationship containing whole table = (StudentID, CourseID)