

Team Members: Ana Parra, Ben Beadle, Patrick Poteet

1. Below are the relational schemas

Student	
<u>UIN</u>	INT
Name	STRING
Major	STRING

Teaches	
<u>Dept</u>	STRING
<u>Number</u>	INT
FacultyID	INT

Class	
<u>Dept</u>	STRING
<u>Number</u>	INT
Hours	INT
Name	STRING

Leads	
<u>FacultyID</u>	INT
StudentOrgID	INT
Joined	DATE

Faculty	
<u>ID</u>	INT
Name	STRING
Salary	INT

MemberOf	
<u>UIN</u>	INT
<u>StudentOrgID</u>	INT
Joined	DATE

Student Organization	
<u>ID</u>	INT
Name	STRING
Category	STRING

Advises	
<u>UIN</u>	INT
FacultyID	INT

EnrolledIn	
<u>Semester</u>	STRING
<u>ClassDept</u>	STRING
<u>ClassNumber</u>	INT
<u>UIN</u>	INT
Grade	INT

2. Functional Dependencies

We don't have any BCNF violations or MVD dependencies. For combining relations without introducing redundancy by deleting the "Advises" table, and putting "FacultyID" into the "Student" table.

Table: Student

UIN → Name Major

Table: Class

Dept Number → Hours Name

Table: Faculty

ID → Name Salary Category

Table: StudentOrganization

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ID → Name category

Table: MemberOf

StudentOrgID UIN → Joined

Table: EnrolledIn

UIN Semester ClassDept ClassNumber → Grade

Table: Teaches

Dept Number → FacultyID

Table: Leads

FacultyID StudentOrgID → Joined

Table: Advises

UIN → FacultyID