

Q3: Determination of whether given tables(Student, Lender, Institution) are in BCNF

1. Student:

- a. Student table is not in BCNF because $\text{StdZip} \rightarrow \text{StdCity}, \text{StdState}$. Create a new table StudentZip, with attributes StdZip, StdCity, StdState. StdZip is the primary key.

2. Lender:

- a. Lender table is in BCNF

3. Institution

- a. Institution table is in BCNF

Final tables:

1. Student(StdNo, StdName, StdEmail, StdAddress, StdZip(FK))
2. StudentZip(StdZip, StdCity, StdState)
3. Lender(LenderNo, LenderName)
4. Institution(InstNo, InstName, InstMascot)