Assignment Week 11

Problem 3:

Determine if the **Student**, **Lender**, and **Institution** tables are in BCNF. In the **Lender** table, LenderName is unique. In the **Institution** table, InstName is unique. In the **Student** table, StdEmail is unique.

Student (**StdNo**, StdName, StdEmail, StdAddress, StdCity, StdState, StdZip)
Lender (**LenderNo**, LenderName)
Institution (**InstNo**, InstName, InstMascot)

Solution 3:

- **the Student table:**

  The dependencies between **StdNo** and **StdEmail** violate BCNF. Both **StdNo** and **StdEmail** are determinants

  Student (**StdNo**, StdName, StdEmail, StdAddress, StdCity, StdState, StdZip)
  UNIQUE(StdEmail)

- **The Institution table:**

  The dependencies between **InstNo** and **InstName** violate BCN

  Institution (**InstNo**, InstName, InstMascot)
  UNIQUE(InstName)

- **The lender table:**

  Lender (**LenderNo**, LenderName)
  UNIQUE(LenderName)