

MODULE 11 Assignment

3.

- The Student table is not in BCNF because StdAddress, StdCity, StdState -> StdZip; or if StdZip is a 9-digit zip code, then StdZip -> Std City, StdState. I would suggest moving forward with a 9-digit zip code design, and split the Student table into two with StdZip as the primary key of the new table.
- The Institution table is not in BCNF because InstMascot is not a unique value (e.g., there are many institutions with a “Tiger” as their mascot). I would split the Institution table into two and create MascotID as the primary key of the new table.

The final **modified** tables would be as follows:

Student (StdNo, StdName, StdEmail, StdAddress, StdZip9)
UNIQUE (StdEmail)
FOREIGN KEY StdZip9 REFERENCES Zipcode

Zipcode (StdZip9, StdCity, StdState)

Lender (LenderNo, LenderName)
UNIQUE (LenderName)

Institution (InstNo, InstName, **MascotID**)
UNIQUE (InstName)
FOREIGN KEY MascotID REFERENCES Mascot

Mascot (MascotID, MascotName)