**Assignment 1 - MODULE 11**

**Ans 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 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)**