**Assignment 1**

**Problem 2:**

**For the ERD in Figure 1, you should indicate applications of the 1-M relationship rule. For each 1-M relationship rule application, you should indicate the changes to the tables you listed in problem 1 including foreign key columns and NOT NULL constraints for foreign keys if necessary.**

**Ans 2:**

**Applications of the 1-M Relationship Rule (Changes in italics below – add three foreign keys and not null constraints to Loan table, and add one foreign key to DisburseLine table.) . Here in DisburseLine, it’s the identifying relationship but as we are just mentioning foreign keys here, I did not make that column a primary key of the DisburseLine table.**

**Loan (LoanNo, StdNo, InstNo, LenderNo, ProcDate, DisbMethod, DisbBank, DateAuth, NoteValue, Subsidized, Rate)**

**FOREIGN KEY (StdNo) REFERENCES Student**

**FOREIGN KEY (LenderNo) REFERENCES Lender**

**FOREIGN KEY (InstNo) REFERENCES Institution**

**StdNo NOT NULL**

**LenderNo NOT NULL**

**InstNo NOT NULL**

**DisburseLine (LoanNo, DateSent, OrigFee, GuarFee)**

**FOREIGN KEY (LoanNo) REFERENCES Loan**

**LoanNo NOT NULL**