Assignment for Module 10

The assignment for Module 10 involves problems for schema conversion. Problems 1 to 4 involve the ERD in Figure 1.
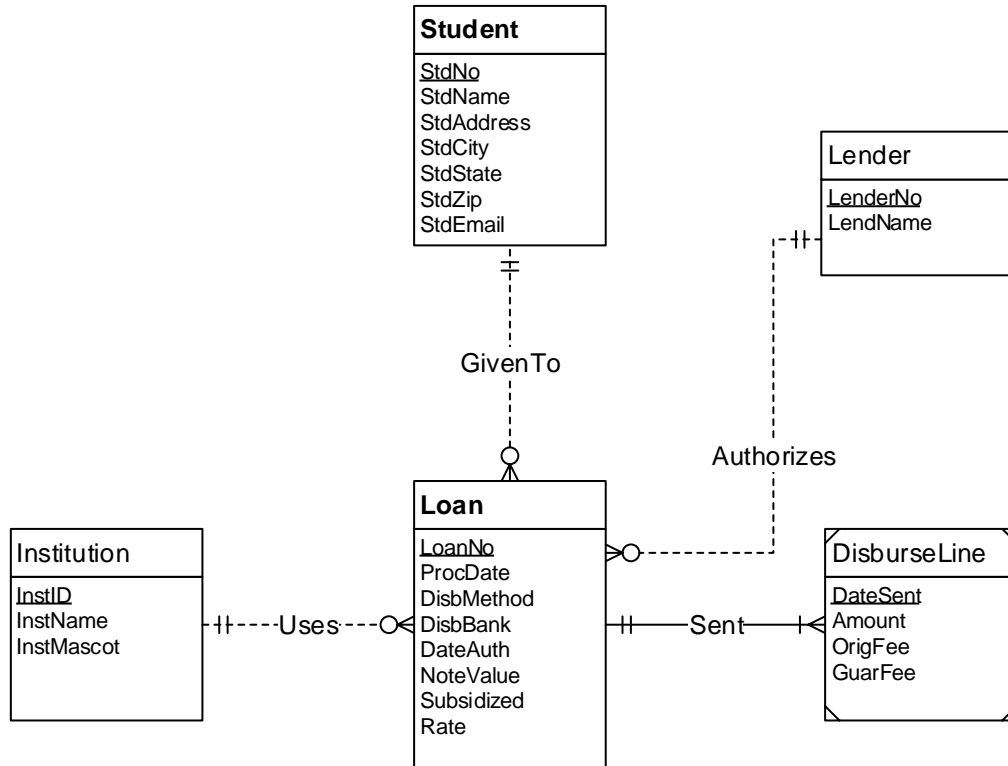

Figure 1: ERD for Problems 1 to 4

1. Requirements for Data Modeling Problems

1. For the ERD in Figure 1, you should indicate the applications of the entity type rule. For each entity type rule application, you should identify the table name, primary key, and other columns. You do not need to write CREATE TABLE statements.

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.

3. For the ERD in Figure 1, you should indicate applications of the M-N relationship rule. For

    each M-N relationship rule application, you should list the table name, primary key, and

    other columns.

4. For the ERD in Figure 1, you should indicate applications of the identifying relationship rule.

    For each identifying relationship rule application, you should indicate the changes to the

    tables you listed in problem 2.

5. Convert the ERD shown in Figure 2 into tables. List the conversion rules used and table

    design. For each table, you should list the primary key, foreign keys, other columns, and

    NOT NULL constraints for foreign keys if necessary. You do not need to write CREATE

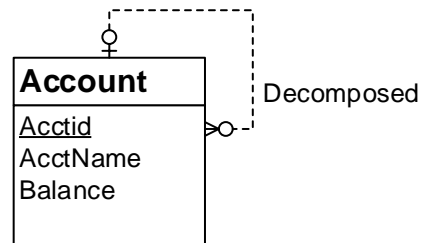   TABLE statements.

Figure 2: ERD for Conversion Problem 5

6. Convert the ERD shown in Figure 3 into tables. List the conversion rules used and table

    design. For each table, you should list the primary key, foreign keys, other columns, and

    NOT NULL constraints for foreign keys if necessary. You do not need to write CREATE
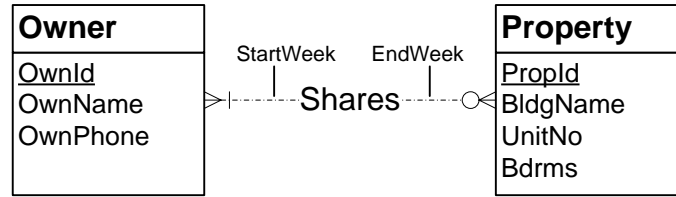
    TABLE statements.

Figure 3: ERD for Conversion Problem 6

2. Submission Requirements

The submission requirements involve evidence that you applied the conversion rules for the ERD in each problem. Place solutions for each problem in the same document with clear labels for each problem. For problems 1 to 4, you should indicate the conversion details and the changes from the previous problem. For problems 5 and 6, you should provide the conversion details indicated.