“Databases and DB Management Systems”
Online Course

Homework Assignment for Class #2 – The Relational Database Model

Writing Assignment
Using correct grammar and punctuation write an essay explaining the purpose of database indexes. Be sure to include detailed descriptions of primary keys, foreign keys, secondary keys, composite keys and the differences between them. This assignment should be a minimum of 500 words.

Problems

Use the database shown in Figure 4 to answer problems 1 through 8.

Insert Database Description Here

1. For each table, identify the primary key and the foreign key(s). If a table does not have a foreign key, write NONE in the assigned space.

2. Do the tables exhibit entity integrity? Answer Yes or No, then explain your answer.

3. Do the tables exhibit referential integrity? Answer Yes or No, then explain your answer. Write NA (Not Applicable) if the table does not have a foreign key.

4. Describe the type(s) of relationship(s) between STORE and REGION.

5. Draw the Entity Relationship diagram for the relationship between STORE and REGION.

6. Draw the Relational Schema for the relationship between STORE and REGION.

7. Describe the type(s) of relationship(s) between EMPLOYEE and STORE.

8. Draw the Entity Relationship diagram to show the relationships among EMPLOYEE, STORE, and REGION.

9. Draw the Relational Schema to show the relationships between EMPLOYEE, STORE, and REGION.

Use the database shown in Figure 5 to answer problems 10 through 13.

Insert Database Description Here

10. For each table, identify, where possible,
a. The primary key
b. A superkey
c. a candidate key
d. The foreign key(s)
e. a secondary key.

11. Create the Entity Relationship diagram.

12. Create the relational schema.

13. Modify the ERD you created to eliminate the problems created by the use of synonyms.