TSQL Chapter 1

1. Give an informal definition of database as used in the expression “relational database management system”.

2. Give an informal definition of database as used in the expression “Human resources database”.

3. Give an informal definition of entity integrity.

4. Give an informal definition of referential integrity.

5. What is a “relation” as defined in the textbook.

Is a representation of a set.

6. Is this table in first normal form (1NF)? Why or why not? If it not, how would you change it?

create table faculty (

facID int primary key,

facName text,

facCreds text;)

Yes, the rows and tables are unique.

7. Is this table in second normal form (2NF)? Why or why not? If it not, how would you change it?

Create table pets (

ownerID int primary key,

petID int primary key,

ownerFirstName text,

ownerLastName text,

petName text,

petType text;

No, the original relation is not split into two relations.

8. Is this table in third normal form? Why or why not? If it not, how would you change it?

9.What is an online transactional processing (OLTP) database? What operations it is optimized for?

OLTP is for data entry and not reporting. Data entry and data consistency.

10. What is a star schema? What operations it is optimized for?

Each dimension is implemented as a single table with redundant data.