2. A primary key is the most specific of the keys when referring to a table. There should only be one primary key per table unless it is a linking table. Also, a primary key cannot be null and is sometimes referred to as a candidate key that is the reference key. A candidate key is the middle of the keys when referring to a table. It is also referred to as a minimal super key because it is for any column or composite of column that uniquely identifies every row. An example would be an employee's name. When an employee's first and last name are listed in a table, together they are a candidate key because they uniquely identify that row. A super key is the most broad of the keys. A super key is a field or set of fields that uniquely identifies each row. It can also be all of the attributes in a table, such as cid, name, city, and discount.

3. Databases are capable of using several different data types. A few of these data types are integers, doubles, strings, booleans, and date/time. Integers are numbers without decimals used to represent numerical amounts or identifiers. Doubles are numbers with decimals used to represent usually money values or percentages. Strings are values consisting of characters used to represent words. Booleans represent the value of data either being true or false under the specified conditions. Date/Time is the value of a date on a calendar or a time of day. These data types can be seen represented in the table below.

Employees' Personal Information

Employee ID [Integer, Not Nullable]	Name [String, Not Nullable]	Date of Employment [Date/Time, Nullable]	Eligible for Loyalty Discount [Boolean, Not Nullable]	Last Week's Pay (In Dollars) [Double, Nullable]
0123	John Smith	05/14/06	True	540.16
0124	Jane Doe	07/12/08	True	496.32
0125	Billy Bob	01/04/15	False	345.56

4. The first rule of relational databases is the normal form rule. All intersections of rows and columns have to be atomic, meaning he information cannot be divided. This is important because two instances of data cannot be listed within one cell in a table because the database will not be able to correctly located the requested information. For example, if John Smith has two numbers he can be reached at, the table only knows how to hold one instance of data. To put the data in normal form, John Smith's name would be listed twice, but with a different number following each name. The second rule of relational databases is to ask what, not where. When searching for data, do not refer to it by row number. This is important because a database is not capable of locating

information by its location, only by its value. An example of this is when searching for a phone number in a database, one does not ask, "where is John's number?" They ask "what is John's number?" because that is how the database knows to find the information. The third rule of relational databases is that rows have to be unique. This is important because if there is an instance of repeated data, the user may receive the wrong data or an error. For example, If a phone number is listed twice under two different names, a user may get in contact with John Smith when they really wanted Jane Doe.