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Database Management
1/31/2017
1. My results from plugging in each query individually gave me the exact same data as the cap 4 database. All of the numbers were the same and there weren't any unordinary changes.

2. There is only one primary key. It includes unique values yet cannot contain a null value. The primary key identifies every record in a database table.

There can be many candidate keys in each table. One of these candidate keys, the best one, is called the primary key. The job of the candidate key is to identify database records with a limited amount of data.

A superkey identifies a row in the relational database management system. In order to identify each row, the superkey is condensed to the least amount of columns necessary.

3. Using SQL table columns are used in order to store different types of data. With this, every column is must be named and have a specific data type. These data types vary based on what information is stored. The data types tell SQL what type of data it is exactly in the table. Some examples of data types include a character data type, stores characters, date data type, stores the year, month and day, and integer data type, which stores a numerical value without a decimal. These are just a few of many different data types that all go into how SQL works. Let's look at the following table as an example. As you can see the table shows recent employee information given by a specific company. In the first row you are able to see that someone by the name of Ron Cavaliere works for this company for 5 years and lives on 47 Braham in Amityville. The first, second, and fourth columns enters the character data type to SQL, the third column has integers and letters involved and the last is an integer data type. The two

columns that are nullable are address and city. As you can see some of the boxes in these two columns are blank. The employee probably opted out of filling out this information thus giving it a null value. The other 3 columns are not nullable.

First Name	Last Name	Address	City	Years Working
Ron	Cavaliere	47 Braham	Amityville	5
Mark	Harris	52 Smith		3
Zach	Graham		Northport	10

4. The first normal rule includes the data in a database table. The table stores information in rows and columns where one or more columns, called the primary key, uniquely identify each row. Each column contains atomic values, and there are not repeating groups of columns.

Ex. If there was a table of 20 orders made by 5 different people the first normal rule requires that there is a row for each order. Having 5 rows just for the 5 different people would violate this rule.

The access rows by content only rule is against the use of row ids with an exception. This means that we can only get our information from the data in a table. Not the name of the row. This also means that there is no order to the rows. Relational products seem to break this rule most of the time.

Unique rows rule is exactly what it sounds like. No two rows can have the same name. They must all be unique. The column should be thought as a “set of tuples” which means nothing is identical within the set.

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