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<center>Lab 2 Short Essays</center>

A column or set of columns that ensure every row will be unique is called a superkey. Every key is a superkey. A candidate key are individual columns in a table that qualifies for uniqueness of all the rows. Another words a candidate key is a super key that has a minimal number of columns in it. A primary key is the columns you choose to maintain uniqueness in a table, a chosen candidate key.

A data type defines what kind of value a column can contain. My topic for this short essay is NBA players, which would be the table name. The list of fields that would be contained in this table are Name, Height, PPG (Points per Game), Team Name. The Name column data type will be character. The Height column data type will be integer. The PPG column data type will be integer. The Team Name column data type will be character. None of these fields are nullable.

The "first normal form" rule means understanding the data to be stored, organizing the data into columns, defining what type of data each column contains, and finally putting related columns into their own table. For example, you would put all the super hero's powers in the Powers table, and all the super hero's information in the SuperHeroDetail table. There cannot be any repeating fields (columns). Like the example mentioned, with this rule you must create two tables and join them in later queries. The "access rows by content only" rule is implemented to ask what not where when trying to find information in a table. You cannot access information by

stating, fourth row from the top. This implies that there is no order on the rows. The query would need to refer to a row with a specific value such as, Steph Curry in the Name column. This is important because if for some reason your tables open in a different order and you query the specific row numbers that are no longer accurate than you are not accessing the correct information. The "all rows must be unique" rule is two rows cannot be identical in all column values at once. A relation is an unordered set of rows which means two rows can't be the same in all attributes. There are some tables where it isn't a bad thing. Temperature readings in a table could repeat and that is normal.