**Course Name: ISTA 420**

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**Lesson Plan 2 Homework**

**What is a primary key constraint? What two other constraints is it equivalent to?**

The PRIMARY KEY constraint uniquely identifies each record in a database table. It must contain UNIQUE values, and cannot contain NULL values. A table can have only one primary key, which may consist of single or multiple fields. The two other constraints that are equivalent to primary key constraint are Column constraint and Table constraint.

**What is a nullability constraint? What does it prevent?**

Nullability constraint enforces the condition that, in that column, every row of data must contain a value. It cannot be left blank during insert or update operations. If this column is left blank, this will produce an error message and the entire insert or update operation will fail.

**What is a unique constraint? What does it prevent?**

The unique constraint ensures that all values in a column are different. Both the unique and primary key constraints provide a guarantee for uniqueness for a column or set of columns. A primary constraint automatically has a unique constrain. However, you can have many unique constraints per table, but only one PRIMARY KEY constraint per table.

**What is a foreign key constraint? What does it allow?**

A foreign key is a key used to link two tables together. It is a field (or collection of fields) in one table that refers to the PRIMARY KEY in another table. The table containing the foreign key is called the child table, and the table containing the candidate key is called the referenced or parent table.

**What is a check constraint? What does it allow?**

CHECK constraints enforce domain integrity by limiting the values that are accepted by one or more columns.

**What is a default constraint? What does it allow?**

The default constraint is used to provide a default value for a column.The default value will be added to all new records IF no other value is specified.

**What is domain integrity? This is not in your text book, but it's important.**

It is the validity of entries for a specific column. In a database system the domain integrity is defined by the datatype and the length, the null value acceptance, the allowable values through techniques like constraints or rule, and the default value.

**What is the difference between the where and the having clauses? How are they alike?**

They are alike as they both filter results. However, they have differences as well. Having clause is used to check conditions after the aggregation takes place where as the where clause is used before the aggregation takes place. The where clause cannot be used with aggregates whereas the having clause can be used with aggregates.

**What SQL operator has the highest precedence? What SQL operator has the lowest precedence?**

The parenthesis operator has the highest precedenceThe assignment operator has the lowest precedence.

**Yes or no: In the SQL standard, is NULL equal to NULL? Why or why not?**

No. This is because Null is unknown, and unknown can never be equal to unknown. Thereby, Null != Null.