**Course Name: ISTA 420**

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**Lesson Plan 4**

**What is a data type? Why do we have data types?**

The data type is a label or guideline for SQL to understand what type of data is expected inside each column, and it also identifies how SQL will interact with the stored data.

**What is a collation? Name four elements of a collation.**

It is a property of character data that encapsulates several aspects like:

1. Language support
2. Sort order
3. Case sensitivity
4. Accent sensitivity

**How would you strip whitespace from a string? For example, suppose you had \ Dave " but wanted only \Dave".**

SELECT RTRIM(LTRIM(‘ DAVE ‘));

**Suppose you wanted to make a list of every college and university that was called an Institute from the college table. Write the query.**

WHERE name LIKE “%INSTITUTE%”;

**How would you find out the index of the first space in a string? For example, the index of the first space in \Barack Hussein Obama" would be 7.**

SELECT CHARINDEX(‘ ‘, ‘Barrack Hussein Obama’);

**How would you select only the first-name in a list of the presidents. First names can be an arbitrarylength, from \Cal" to \Benjamin."**

SELECT Left(name, CHARINDEX(‘ ‘, name)) FROM presidents;

**Payments are due exactly 30 days from the date of the last function. Write a select query that calculatesthe date of the next payment. Pretend we want to update a column in a database that contains thedate of the next payment. We will do this when we write UPDATE queries.**

SELECT dateadd(day, 30, orderdate) as nextpayment FROM orders;

**What function returns the current date? This is very useful in a table that maintains a log of events,such as user logins.**

Getdate() returns the current date.