**SQL String Functions Overview**

**LEFT**

* **Description**: Returns a specified number of characters from the beginning of a string.
* **Syntax**: LEFT(string, length)
* **Example**: LEFT('AdventureWorks', 5) returns 'Adven'.

**RIGHT**

* **Description**: Returns a specified number of characters from the end of a string.
* **Syntax**: RIGHT(string, length)
* **Example**: RIGHT('AdventureWorks', 5) returns 'Works'.

**CHARINDEX**

* **Description**: Finds the position of the first occurrence of a substring within another string.
* **Syntax**: CHARINDEX(substring, string)
* **Example**: CHARINDEX('Works', 'AdventureWorks') returns 10, as 'Works' starts at position 10.

**SUBSTRING**

* **Description**: Returns a portion of a string starting from a specified position.
* **Syntax**: SUBSTRING(string, start\_position, length)
* **Example**: SUBSTRING('AdventureWorks', 1, 9) returns 'Adventure'.

**PATINDEX**

* **Description**: Finds the position of the first occurrence of a pattern within a string.
* **Syntax**: PATINDEX('%pattern%', string)
* **Example**: PATINDEX('%Works%', 'AdventureWorks') returns 10.

**UPPER**

* **Description**: Converts all characters in a string to uppercase.
* **Syntax**: UPPER(string)
* **Example**: UPPER('AdventureWorks') returns 'ADVENTUREWORKS'.

**LOWER**

* **Description**: Converts all characters in a string to lowercase.
* **Syntax**: LOWER(string)
* **Example**: LOWER('AdventureWorks') returns 'adventureworks'.

**LEN**

* **Description**: Returns the length of a string.
* **Syntax**: LEN(string)
* **Example**: LEN('AdventureWorks') returns 13.

**REPLACE**

* **Description**: Replaces all occurrences of a substring within another string with a new substring.
* **Syntax**: REPLACE(string, old\_substring, new\_substring)
* **Example**: REPLACE('AdventureWorks', 'Works', 'Solutions') returns 'AdventureSolutions'.

**STUFF**

* **Description**: Inserts a substring into another string, replacing a specified number of characters.
* **Syntax**: STUFF(string, start\_position, length, new\_substring)
* **Example**: STUFF('AdventureWorks', 11, 5, 'Solutions') returns 'AdventureSolutions', as 'Works' at position 11 is replaced with 'Solutions'.

**STR**

* **Description**: Converts a number to a string with a specified length and number of decimal places.
* **Syntax**: STR(number, length, decimal\_places)
* **Example**: STR(123.45, 8, 2) returns ' 123.45'. The first argument is the number being converted, the second is the total length of the string, and the third is the number of decimal places.