

Experiment – 2.2 : Experiment with the following: Common String functions

SQL provides a variety of string functions that allow you to manipulate and work with character or text data within your database. These functions are helpful for tasks such as searching, formatting, and modifying strings. Here are some commonly used string functions in SQL:

CONCAT(): Combines two or more strings into a single string.

```
SELECT CONCAT('Hello', ' ', 'World'); -- Result: 'Hello World'
```

LENGTH() or LEN(): Returns the length (number of characters) of a string.

```
SELECT LENGTH('SQL functions'); -- Result: 13
```

UPPER(): Converts a string to uppercase.

```
SELECT UPPER('uppercase'); -- Result: 'UPPERCASE'
```

LOWER(): Converts a string to lowercase.

```
SELECT LOWER('LOWERCASE'); -- Result: 'lowercase'
```

SUBSTRING() or SUBSTR(): Returns a portion of a string.

```
SELECT SUBSTRING('Hello, World', 7, 5); -- Result: 'World'
```

LEFT(): Returns a specified number of characters from the beginning of a string.

```
SELECT LEFT('Database', 3); -- Result: 'Dat'
```

RIGHT(): Returns a specified number of characters from the end of a string.

```
SELECT RIGHT('Database', 3); -- Result: 'ase'
```

REPLACE(): Replaces all occurrences of a substring within a string with another substring.

```
SELECT REPLACE('The quick brown fox', 'brown', 'red'); -- Result: 'The quick red fox'
```

TRIM(): Removes leading and trailing spaces or specified characters from a string.

```
SELECT TRIM(' Hello '); -- Result: 'Hello'
```

LTRIM(): Removes leading spaces or specified characters from a string.

```
SELECT LTRIM(' Left Trim'); -- Result: 'Left Trim'
```

RTRIM(): Removes trailing spaces or specified characters from a string.

```
SELECT RTRIM('Right Trim '); -- Result: 'Right Trim'
```

CHARINDEX() or INSTR(): Returns the position of a substring within a string.

```
SELECT CHARINDEX('World', 'Hello, World'); -- Result: 7
```

LEFT() and CHARINDEX() combined: Extracts text from the beginning of a string until a specific character or substring is found.

```
SELECT LEFT('example@example.com', CHARINDEX('@', 'example@example.com') - 1); --  
Result: 'example'
```

FORMAT(): Formats a date, time, or number as a string using a specified format.

```
SELECT FORMAT(GETDATE(), 'yyyy-MM-dd'); -- Result: '2023-10-31'
```