

1. ASCII()

Purpose: Returns the ASCII code value of the first character in a string.

Example:

sql

 Copy code

```
SELECT ASCII('A') AS AsciiValue; -- Output: 65 (ASCII code for 'A') SELECT ASCII('z')
AS AsciiValue; -- Output: 122 (ASCII code for 'z')
```

2. CHAR()

Purpose: Returns the character corresponding to a given ASCII code.

Example:

sql

 Copy code

```
SELECT CHAR(65) AS Character; -- Output: A (Character for ASCII code 65) SELECT
CHAR(122) AS Character; -- Output: z (Character for ASCII code 122)
```

3. CHARINDEX()

Purpose: Returns the starting position of a search string in a given string. If not found, it returns 0.

Example:

sql

 Copy code

```
SELECT CHARINDEX('G', 'KING') AS Position; -- Output: 4 (Position of 'G' in the string
'KING') SELECT CHARINDEX('X', 'KING') AS Position; -- Output: 0 (Character 'X' not
found in 'KING')
```

4. LEFT()

Purpose: Returns the left part of a string, up to the specified number of characters.

Example:

sql

 Copy code

```
SELECT LEFT('HELLO', 2) AS LeftPart; -- Output: HE (First 2 characters of 'HELLO')
SELECT LEFT('WORLD', 3) AS LeftPart; -- Output: WOR (First 3 characters of 'WORLD')
```

5. RIGHT()

Purpose: Returns the right part of a string, up to the specified number of characters.

Example:

sql

 Copy code

```
SELECT RIGHT('HELLO', 2) AS RightPart; -- Output: LO (Last 2 characters of 'HELLO')
SELECT RIGHT('WORLD', 3) AS RightPart; -- Output: RLD (Last 3 characters of 'WORLD')
```

6. LEN()

Purpose: Returns the number of characters in a string, excluding trailing spaces.

Example:

sql

 Copy code

```
SELECT LEN('HELLO') AS Length; -- Output: 5 (Number of characters in 'HELLO')
SELECT LEN(' HELLO ') AS Length; -- Output: 6 (Leading and trailing spaces are ignored)
```

7. LOWER()

Purpose: Converts all characters in a string to lowercase.

Example:

sql

 Copy code

```
SELECT LOWER('HELLO WORLD') AS LowerCase; -- Output: hello world (String in lowercase)
SELECT LOWER('SQL Server') AS LowerCase; -- Output: sql server
```

8. UPPER()

Purpose: Converts all characters in a string to uppercase.

Example:

sql

Copy code

```
SELECT UPPER('hello world') AS UpperCase; -- Output: HELLO WORLD (String in uppercase)
SELECT UPPER('sql server') AS UpperCase; -- Output: SQL SERVER
```

Practical Example Combining Functions

Imagine a `Customers` table with a column `FullName` containing values like `'John Doe'` .

Query:

sql

Copy code

```
SELECT FullName, LEN(FullName) AS NameLength, LOWER(FullName) AS LowerName,
UPPER(FullName) AS UpperName, LEFT(FullName, 4) AS FirstPart, RIGHT(FullName, 3) AS
LastPart, CHARINDEX('o', FullName) AS PositionOfO FROM Customers;
```

Result:

FullName	NameLength	LowerName	UpperName	FirstPart	LastPart	PositionOfO
John Doe	8	john doe	JOHN DOE	John	Doe	2
Alice Green	11	alice green	ALICE GREEN	Alice	een	0