# Text Formatting in SQL Server

In this article we are going to learn how to use LOWER(), UPPER(), LEFT() and RIGHT() functions in SQL Server to format a string. Examples are also included in this article.

Refer to the below table for the following examples. Imagine the employee table having data in the following format.

### **Employees Table:**

Id	FirstName	LastName
1	"JAmes"	"WilliamS"
2	"michael"	"Clark"
3	"ROBERT"	"WILSON"
4	"MARIA"	"GARCIA"
5	"DAVid"	"Smith"
6	"Elizabeth"	"Rodriguez"
7	"MARY"	"SMITH"
8	"nancy"	"HErnandez"
9	"Maria"	"Martinez"
10	"JAMES"	"JOHNSON"

**Table 1. Employee Data** 

Use SQL Server to run the following query to create sample data for given examples.

### **SQL Script:**

```
CREATE TABLE Employees(
    Id INT NOT NULL,
    FirstName VARCHAR (50) NULL,
    LastName VARCHAR (50) NULL,
    PRIMARY KEY (Id)
);
```

```
INSERT Employees(Id, FirstName, LastName) VALUES(1, 'JAmes', 'WilliamS');
INSERT Employees(Id, FirstName, LastName) VALUES(2, 'michael', 'Clark');
INSERT Employees(Id, FirstName, LastName) VALUES(3, 'ROBERT', 'WILSON');
INSERT Employees(Id, FirstName, LastName) VALUES(4, 'MARIA', 'GARCIA');
INSERT Employees(Id, FirstName, LastName) VALUES(5, 'DAVid', 'Smith');
INSERT Employees(Id, FirstName, LastName) VALUES(6, 'Elizabeth',
'Rodriguez');
INSERT Employees(Id, FirstName, LastName) VALUES(7, 'MARY', 'SMITH');
INSERT Employees(Id, FirstName, LastName) VALUES(8, 'nancy', 'HErnandez');
INSERT Employees(Id, FirstName, LastName) VALUES(9, 'Maria', 'Martinez');
INSERT Employees(Id, FirstName, LastName) VALUES(10, 'JAMES', 'JOHNSON');
```

Script 1. Sample Data

## LOWER() Function

LOWER() function is given by the following format.

```
SELECT LOWER(Column)
```

**Table 2. LOWER Function** 

Where *Column* is the text consider for formating into lower case. It is a required parameter.

LOWER() function returns text into lower case.

## Example 1. Convert to Lowercase

Using the below query we can format FirstName and LastName into lower case.

### **SQL Script:**

```
UPDATE Employees SET FirstName = LOWER(FirstName), LastName =
UPPER(LastName);
SELECT * FROM Employees;
```

**Script 2. Convert to Lowercase** 

Above query updates employee data in the following format.

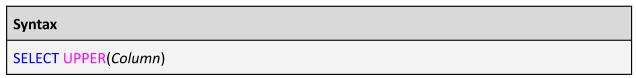
#### **Result:**

Id	FirstName	LastName
1	"james"	"williams"
2	"michael"	"clark"
3	"robert"	"wilson"
4	"maria"	"garcia"
5	"david"	"smith"
6	"elizabeth"	"rodriguez"
7	"mary"	"smith"
8	"nancy"	"hernandez"
9	"maria"	"martinez"
10	"james"	"johnson"

**Table 3. Converted Data to Lowercase** 

# UPPER(), LEFT() AND RIGHT() Functions in SQL

UPPER() function is given by the following format.



**Table 4. UPPER Function** 

Where *Column* is the text consider for formating into upper case. It is a required parameter. LOWER() function returns text into upper case.

LEFT() function is given by the following format.

Syntax
SELECT LEFT(Column, Length)

#### **Table 5. LEFT Function**

Where *Column* is the text consider for. It is a required parameter.

Length is the number of characters from left.

LEFT function returns a string of *Length* number of characters from *Column* string.

RIGHT() function is given by the following format.

```
Syntax
SELECT RIGHT(Column, Value)
```

**Table 6. RIGHT Function** 

Where *Column* is the text consider for. It is a required parameter.

Length is the number of characters from left.

RIGHT function returns a string of *Length* number of characters from *Column* string.

Example 2. Convert First Characters to Uppercase.

Using this example we can convert the first letter to uppercase.

### **SQL Script:**

```
UPDATE Employees SET FirstName = UPPER(LEFT(FirstName,1)) +
LOWER(RIGHT(FirstName,LEN(FirstName)-1))

,SET LastName = UPPER(LEFT(LastName,1)) + LOWER(RIGHT(LastName,LEN(LastName)-1));

SELECT * FROM Employees;
```

**Script 3. To Remove Left Spaces** 

Above query updates employee data in the following format.

#### **Result:**

Id	FirstName	LastName
1	"James"	"Williams"
2	"Michael"	"Clark"
3	"Robert"	"Wilson"

4	"Maria"	"Garcia"
5	"David"	"Smith"
6	"Elizabeth"	"Rodriguez"
7	"Mary"	"Smith"
8	"Nancy"	"Hernandez"
9	"Maria"	"Martinez"
10	"James"	"Johnson"

**Table 7. Converted Data in First Letter Capital** 

# **Summary of Examples**

In the above examples, we got the result in two steps. First, we converted the text into lowercase. Second, we converted the first letter in uppercase. By using the below query we can get the same result in a single step.

### **SQL Script:**

```
UPDATE Employees SET FirstName = UPPER(LEFT(LOWER(FirstName),1)) +
LOWER(RIGHT(LOWER(FirstName),LEN(LOWER(FirstName))-1))
, LastName = UPPER(LEFT(LOWER(LastName),1)) +
LOWER(RIGHT(LOWER(LastName),LEN(LOWER(LastName))-1));

SELECT * FROM Employees;
```

Script 4. Convert to Lowercase with First letter Capital