

# LOWER Function

All alphabetical characters in the input value are converted to lowercase in the output value.

Input can be a column reference or a string literal.

## Basic Usage

### Column reference example:

```
derive type:single value:LOWER(MyName)
```

**Output:** All of the string values in the `MyName` column value are written to the new column in lowercase.

### String literal example:

```
derive type:single value:LOWER('Hello, World')
```

**Output:** The string `hello, world` is written to the new column.

## Syntax and Arguments

```
derive type:single value:LOWER(column_string)
```

Argument	Required?	Data Type	Description
<code>column_string</code>	Y	string	Name of the column or string literal to be applied to the function

For more information on syntax standards, see *Language Documentation Syntax Notes*.

### `column_string`

Name of the column or string constant to be converted.

- Missing string or column values generate missing string results.
- String constants must be quoted ('Hello, World').
- Multiple columns and wildcards are not supported.

### Usage Notes:

Required?	Data Type	Example Value
Yes	String literal or column reference	<code>myColumn</code>

## Examples

 **Tip:** For additional examples, see *Common Tasks*.

### Example - uppercase, lowercase, propercase functions

#### Source:

In the following example, you can see a number of input values in the leftmost column. The output columns are blank.

input	uppercase	lowercase	propercase
AbCdEfGh IjKIMnO			
go West, young man!			
Oh, *(\$%(&! That HURT!			
A11 w0rk and n0 0play makes Jack a dull boy.			

**Transform:**

To generate uppercase, lowercase, and propercase values in the output columns, use the following transforms:

```
set col:uppercase value:UPPER(input)
```

```
set col:lowercase value:LOWER(input)
```

```
set col:propercase value:PROPER(input)
```

**Results:**

input	uppercase	lowercase	propercase
AbCdEfGh IjKIMnO	ABCDEFGH IJKLMNO	abcdefgh ijklmno	Abcdefgh Ijklmno
go West, young man!	GO WEST, YOUNG MAN!	go west, young man!	go West, Young Man!
Oh, *(\$%(&! That HURT!	OH, *(\$%(&! THAT HURT!	oh, *(\$%(&! that hurt!	oh, *(\$%(&! That Hurt!
A11 w0rk and n0 0play makes Jack a dull boy.	A11 WORK AND NO 0PLAY MAKES JACK A DULL BOY.	a11 w0rk and n0 0play makes jack a dull boy.	A11 W0rk And NO 0play Makes Jack A Dull Boy.