

# 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.

**Wrangle vs. SQL:** This function is part of Wrangle , a proprietary data transformation language. Wrangle is not SQL. For more information, see *Wrangle Language*.

## Basic Usage

### Column reference example:

```
lower(MyName)
```

**Output:** Returns the string value from the `MyName` column in lowercase.

### String literal example:

```
lower('Hello, World')
```

**Output:** The string `hello, world` is returned.

## Syntax and Arguments

```
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 IjKlMnO			
go West, young man!			
Oh, *(\$%(&! That HURT!			
A11 w0rk and n0 0play makes Jack a dull boy.			

### Transformation:

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

<b>Transformation Name</b>	Edit column with formula
<b>Parameter: Columns</b>	uppercase
<b>Parameter: Formula</b>	UPPER(input)

<b>Transformation Name</b>	Edit column with formula
<b>Parameter: Columns</b>	lowercase
<b>Parameter: Formula</b>	LOWER(input)

<b>Transformation Name</b>	Edit column with formula
<b>Parameter: Columns</b>	propercase
<b>Parameter: Formula</b>	PROPER(input)

### Results:

input	uppercase	lowercase	propercase
AbCdEfGh IjKlMnO	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.