

# EXAMPLE - String Comparison Functions

The following example demonstrates functions that can be used to compare two sets of strings. These functions include the following:

- `STRINGGREATERTHAN` - Evaluates to `true` if the first string is greater than the second string. See *STRINGGREATERTHAN Function*.
- `STRINGGREATERTHANEQUAL` - Evaluates to `true` if the first string is greater than or equal to the second string. See *STRINGGREATERTHANEQUAL Function*.
- `STRINGLESSTHAN` - Evaluates to `true` if the first string is less than the second string. See *STRINGLESSTHAN Function*.
- `STRINGLESSTHANEQUAL` - Evaluates to `true` if the first string is less than or equal to the second string. See *STRINGLESSTHANEQUAL Function*.
- `EXACT` - Evaluates to `true` if the first string is an exact match with the second string. See *EXACT Function*.

## Source:

The following table contains some example strings to be compared.

rowId	stringA	stringB
1	a	a
2	a	A
3	a	b
4	a	1
5	a	;
6	;	1
7	a	a
8	a	aa
9	abc	x

Note that in row #6, `stringB` begins with a space character.

## Transformation:

For each set of strings, the following functions are applied to generate a new column containing the results of the comparison.

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	<code>STRINGGREATERTHAN(stringA,stringB)</code>
<b>Parameter: New column name</b>	'greaterThan'

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	<code>STRINGGREATERTHANEQUAL(stringA,stringB)</code>

<b>Parameter: New column name</b>	'greaterThanEqual'
-----------------------------------	--------------------

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	STRINGLESSTHAN(stringA,stringB)
<b>Parameter: New column name</b>	'lessThan'

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	STRINGLESSTHANEQUAL(stringA,stringB)
<b>Parameter: New column name</b>	'lessThanEqual'

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	EXACT(stringA,stringB)
<b>Parameter: New column name</b>	'exactEqual'

**Results:**

In the following table, the Notes column has been added manually.

rowId	stringA	stringB	lessThanEqual	lessThan	greaterThanEqual	greaterThan	exactEqual	Notes
1	a	a	true	false	true	false	true	Evaluation of differences between STRINGLESSTHAN and STRINGGREATER THAN and greater than versions.
2	a	A	true	true	false	false	false	Comparisons are case-sensitive. Uppercase letters are greater than lowercase letters.

3	a	b	true	true	false	false	false	Letters later in the alphabet (b) are greater than earlier letters (a).
4	a	1	false	false	true	true	false	Letters (a) are greater than digits (1).
5	a	;	false	false	true	true	false	Letters (a) are greater than non-alphanumerics (;).
6	;	1	true	true	false	false	false	Digits (1) are greater than non-alphanumerics (;). Therefore, the following characters are listed in order of evaluation: <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">Aa1;</div>
7	a	a	false	false	true	true	false	Letters (and any non-breaking character) are greater than space values.
8	a	aa	true	true	false	false	false	The second string is greater, since it contains one additional string at the end.
9	abc	x	true	true	false	false	false	The second string is greater, since its first letter is greater than the first letter of the first string.