

# ARRAYUNIQUE Function

Generates an array of all unique elements among one or more arrays.

- Inputs are column names or array literals.
- If an element appears twice in one or more arrays, it is listed once in the output array.

**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

### Array literal reference example:

```
arrayunique(["A","B"],["A","C"])
```

**Output:** Returns a single array:

```
["A","B","C"]
```

### Single-column reference example:

```
arrayunique([array1])
```

**Output:** Returns a single array of all unique elements in `array1` .

### Multi-column reference example:

```
arrayunique([array1,array2])
```

**Output:** Returns a single array listing all unique elements in `array1` and `array2` .

## Syntax and Arguments

```
arrayunique(array_ref1,array_ref2)
```

Argument	Required?	Data Type	Description
array_ref1	Y	string or array	Name of first column or first array literal to apply to the function
array_ref2	N	string or array	Name of second column or second array literal to apply to the function

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

### **array\_ref1, array\_ref2**

Array literals or names of the array columns whose unique elements you want to derive.

### **Usage Notes:**

Required?	Data Type	Example Value
Yes (at least one)	Array literal or column reference	myArray1, myArray2

## Examples

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

### Example - Simple unique example

This simple example illustrates how the following functions operate on nested data.

- **ARRAYCONCAT** - Concatenate multiple arrays together. See *ARRAYCONCAT Function*.
- **ARRAYINTERSECT** - Find the intersection of elements between multiple arrays. See *ARRAYINTERSECT Function*.
- **ARRAYCROSS** - Compute the cross product of multiple arrays. See *ARRAYCROSS Function*.
- **ARRAYUNIQUE** - Generate unique values across multiple arrays. See *ARRAYUNIQUE Function*.

### Source:

Code formatting has been applied to improve legibility.

Item	ArrayA	ArrayB
Item1	[ "A", "B", "C" ]	[ "1", "2", "3" ]
Item2	[ "A", "B" ]	[ "A", "B", "C" ]
Item3	[ "D", "E", "F" ]	[ "4", "5", "6" ]

### Transformation:

You can apply the following transforms in the following order. Note that the column names must be different from the transform name, which is a reserved word.

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	ARRAYCONCAT([Letters, Numerals])
<b>Parameter: New column name</b>	'concat2'

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	ARRAYINTERSECT([Letters, Numerals])
<b>Parameter: New column name</b>	'intersection2'

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula

<b>Parameter: Formula</b>	ARRAYCROSS([Letters, Numerals])
<b>Parameter: New column name</b>	'cross2'

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	ARRAYUNIQUE([Letters, Numerals])
<b>Parameter: New column name</b>	'unique2'

### Results:

For display purposes, the results table has been broken down into three separate sets of columns.

#### Column set 1:

Item	ArrayA	ArrayB	concat2	intersection2
Item1	["A", "B", "C"]	["1", "2", "3"]	["A", "B", "C", "1", "2", "3"]	[ ]
Item2	["A", "B"]	["A", "B", "C"]	["A", "B", "A", "B", "C"]	["A", "B"]
Item3	["D", "E", "F"]	["4", "5", "6"]	["D", "E", "F", "4", "5", "6"]	[ ]

#### Column set 2:

Item	cross2
Item1	[["A", "1"], ["A", "2"], ["A", "3"], ["B", "1"], ["B", "2"], ["B", "3"], ["C", "1"], ["C", "2"], ["C", "3"]]
Item2	[["A", "A"], ["A", "B"], ["A", "C"], ["B", "A"], ["B", "B"], ["B", "C"]]
Item3	[["D", "4"], ["D", "5"], ["D", "6"], ["E", "4"], ["E", "5"], ["E", "6"], ["F", "4"], ["F", "5"], ["F", "6"]]

#### Column set 3:

Item	unique2
Item1	["A", "B", "C", "1", "2", "3"]
Item2	["A", "B", "C"]
Item3	["D", "E", "F", "4", "5", "6"]