

# ARRAYMERGEELEMENTS Function

## Contents:

- *Basic Usage*
- *Syntax and Arguments*
  - *array\_ref*
  - *string\_delimiter*
- *Examples*
  - *Example - Podium Race Finishes*

---

Merges the elements of an array in left to right order into a string. Values are optionally delimited by a provided delimiter.

## Basic Usage

### Array literal reference example:

```
derive type:single value:ARRAYMERGEELEMENTS(["A","B","C","D"],"-")
```

**Output:** Generates a new column with the following String value in it: "A-B-C-D".

### Column reference example:

```
derive type:single value:ARRAYMERGEELEMENTS([myValues] as:myValuesMergedTogether')
```

**Output:** Generates the new `myValuesMergedTogether` column containing all of the elements in the arrays in the `myElement` column joined together without a delimiter between them.

## Syntax and Arguments

```
derive type:single value:ARRAYMERGEELEMENTS(array_ref,my_element, [string_delimiter])
```

Argument	Required?	Data Type	Description
array_ref	Y	array	Name of Array column, Array literal, or function returning an Array to apply to the function
string_delimiter	Y	string	Optional String delimiter to insert between merged elements in the output String.

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

### array\_ref

Name of the array column, array literal, or function whose elements you wish to merge.

- Multiple columns and wildcards are not supported.

### Usage Notes:

Required?	Data Type	Example Value
Yes	String (column reference or function) or array literal	myArray1

### string\_delimiter

Optional string value to insert between elements in the merged output string.

#### Usage Notes:

Required?	Data Type	Example Value
No	String	" - "

### Examples

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

### Example - Podium Race Finishes

This example covers the following functions:

- **ARRAYSLICE** - Returns an array that is a slice of another array, based on the provided starting and ending index numbers. See *ARRAYSLICE Function*.
- **ARRAYMERGEELEMENTS** - Merges the elements of an array together into a string. See *ARRAYMERGEELEMENTS Function*.

#### Source:

The following set of arrays contain results, in order, of a series of races. From this list, the goal is to extract a list of the podium finishers for each race as a single string.

RaceId	RaceResults
1	["racer3","racer5","racer2","racer1","racer6"]
2	["racer6","racer4","racer2","racer1","racer3","racer5"]
3	["racer4","racer3","racer5","racer2","racer6","racer1"]
4	["racer1","racer2","racer3","racer5"]
5	["racer5","racer2","racer4","racer6","racer3"]

#### Transform:

From the list of arrays, the first step is to gather the top-3 finishers from each race:

```
derive type: single value: ARRAYSLICE(RaceResults, 0, 3) as: 'arrPodium'
```

The above captures the first three values of the RaceResults arrays into a new set of arrays.

The next step is to merge this new set of arrays into a single string:

```
derive type: single value: ARRAYMERGEELEMENTS(arrPodium, ',') as: 'strPodium'
```

**Results:**

<b>RaceId</b>	<b>RaceResults</b>	<b>arrPodium</b>	<b>strPodium</b>
1	["racer3","racer5","racer2","racer1","racer6"]	["racer3","racer5","racer2"]	racer3,racer5,racer2
2	["racer6","racer4","racer2","racer1","racer3","racer5"]	["racer6","racer4","racer2"]	racer6,racer4,racer2
3	["racer4","racer3","racer5","racer2","racer6","racer1"]	["racer4","racer3","racer5"]	racer4,racer3,racer5
4	["racer1","racer2","racer3","racer5"]	["racer1","racer2","racer3"]	racer1,racer2,racer3
5	["racer5","racer2","racer4","racer6","racer3"]	["racer5","racer2","racer4"]	racer5,racer2,racer4