ARRAYMERGEELEMENTS Function

Contents:

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

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:

```
arraymergeelements(["A","B","C","D"],"-")
```

Output: Returns the following String value: `"A-B-C-D"`.

Column reference example:

```
arraymergeelements([myValues)
```

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

```
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"]

Transformation:

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

Transformation Name	`New formula`
Parameter: Formula type	`Single row formula`

Parameter: Formula	`ARRAYSLICE(RaceResults, 0, 3)`
Parameter: New column name	`'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:

Transformation Name	`New formula`
Parameter: Formula type	`Single row formula`
Parameter: Formula	`ARRAYMERGEELEMENTS(arrPodium, ',')`
Parameter: New column name	`'strPodium'`

Results:

RaceId	RaceResults	arrPodium	strPodium
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