

# COALESCE Function

Function returns the first non-missing value found in an array of columns.

The order of the columns listed in the function determines the order in which they are searched.

- If you need to perform analysis across multiple columns of heterogeneous data, see *Analyze across Multiple Columns*.
- If you need to perform analysis across multiple homogeneous columns, see *Calculate Metrics across Columns*.

**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

```
coalesce([col1,col2,col3])
```

**Output:** Returns the first non-missing detected in `col1`, `col2`, or `col3` in that order.

## Syntax and Arguments

```
coalesce([col_ref1,col_ref2, col_ref3])
```

A reference to a single column does not require brackets. References to multiple columns must be passed to the function as an array of column names.

Argument	Required?	Data Type	Description
col_ref1	Y	string	Name of the first column to find the first non-missing value
col_ref2	N	string	Name of the second column to find the first non-missing value
col_ref3	N	string	Name of the third column to find the first non-missing value

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

### col\_ref1, col\_ref2, col\_ref3

Name of the column(s) searched for the first non-missing value.

### Usage Notes:

Required?	Data Type	Example Value
Yes	String (column reference)	[myColumn1, myColumn2]

## Examples

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

### Example - Find first time

You are tracking multiple racers across multiple heats. Racers might sit out heats for various reasons.

#### Source:

Here's the race data.

Racer	Heat1	Heat2	Heat3
Racer X		38.22	37.61
Racer Y	41.33		38.04
Racer Z	39.27	39.04	38.85

#### Transformation:

Use the following transform to grab the first non-missing value from the Heat columns:

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	<code>coalesce([Heat1, Heat2, Heat3])</code>
<b>Parameter: New column name</b>	'firstTime'

#### Results:

Racer	Heat1	Heat2	Heat3	firstTime
Racer X		38.22	37.61	38.22
Racer Y	41.33		38.04	41.33
Racer Z	39.27	39.04	38.85	39.27