

ISMISSING Function

The `ISMISSING` function tests whether a column of values is missing or null. For input column references, this function returns `true` or `false`.

- You can define a conditional test in a single step for valid values. See *IFMISSING Function*.
- Missing values are different from null values. To test for the presence of null values exclusively, see *ISNULL Function*.

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

```
ismissing(Qty)
```

Output: Returns `true` if the value in the `Qty` column is missing.

Syntax and Arguments

```
ismissing(column_string)
```

Argument	Required?	Data Type	Description
column_string	Y	string	Name of column or string literal to be applied to the function

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

column_string

Name of the column or string literal to be tested for missing values.

- Missing literals or column values generate missing string results.
- Multiple columns are supported.
- Wildcards are not supported.

Usage Notes:

Required?	Data Type	Example Value
Yes	String literal or column reference	myColumn

Examples

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

Example - Type check functions

This example illustrates how various type checking functions can be applied to your data.

Functions:

Item	Description
VALID Function	Tests whether a set of values is valid for a specified data type and is not a null value.
ISMISMATCHED Function	Tests whether a set of values is not valid for a specified data type.
ISMISSING Function	The ISMISSING function tests whether a column of values is missing or null. For input column references, this function returns <code>true</code> or <code>false</code> .
ISNULL Function	The ISNULL function tests whether a column of values contains null values. For input column references, this function returns <code>true</code> or <code>false</code> .
NULL Function	The NULL function generates null values.

Source:

Some source values that should match the State and Integer data types:

State	Qty
CA	10
OR	-10
WA	2.5
ZZ	15
ID	
	4

Transformation:

Invalid State values: You can test for invalid values for State using the following:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	ISMISMATCHED (State, 'State')

The above transform flags rows 4 and 6 as mismatched.

NOTE: A missing value is not valid for a type, including String type.

Invalid Integer values: You can test for valid matches for Qty using the following:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	(ISVALID (Qty, 'Integer') && (Qty > 0))
Parameter: New column name	'valid_Qty'

The above transform flags as valid all rows where the `Qty` column is a valid integer that is greater than zero.

Missing values: The following transform tests for the presence of missing values in either column:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	<code>(ISMISSING(State) ISMISSING(Qty))</code>
Parameter: New column name	'missing_State_Qty'

After re-organizing the columns using the `move` transform, the dataset should now look like the following:

State	Qty	mismatched_State	valid_Qty	missing_State_Qty
CA	10	false	true	false
OR	-10	false	false	false
WA	2.5	false	false	false
ZZ	15	true	true	false
ID		false	false	true
	4	false	true	true

Since the data does not contain null values, the following transform generates null values based on the preceding criteria:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	<code>((mismatched_State == 'true') (valid_Qty == 'false') (missing_State_Qty == 'true')) ? NULL() : 'ok'</code>
Parameter: New column name	'status'

You can then use the `ISNULL` check to remove the rows that fail the above test:

Transformation Name	Filter rows
Parameter: Condition	Custom formula
Parameter: Type of formula	Custom single
Parameter: Condition	<code>ISNULL('status')</code>
Parameter: Action	Delete matching rows

Results:

Based on the above tests, the output dataset contains one row:

State	Qty	mismatched_State	valid_Qty	missing_State_Qty	status

CA	10	false	true	false	ok
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