

NULL Function

The `NULL` function generates null values.

- The `ISNULL` function tests for the presence of null values. See *ISNULL Function*.
- Null values are different from missing values.
 - To test for missing values, see *ISMISSING Function*.
- For more information on null values, see *Manage Null Values*.

Basic Usage

```
derive type:single value:NULL()
```

Output: Generates a column of null values.

```
derive type:single value: IF((ISNULL(FirstName) || ISNULL(LastName)), null(), 'ok')
as: 'status'
```

Output: If there are null values in either the `FirstName` or `LastName` column, generate a null value in the `status` column. Otherwise, the column value is `ok`.

Syntax

There are no arguments for this function.

Examples

Example - Type check functions

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

- `ISVALID` - Returns `true` if the input matches the specified data type. See *VALID Function*.
- `ISMISMATCHED` - Returns `true` if the input does not match the specified data type. See *ISMISMATCHED Function*.
- `ISMISSING` - Returns `true` if the input value is missing. See *ISMISSING Function*.
- `ISNULL` - Returns `true` if the input value is null. See *ISNULL Function*.
- `NULL` - Generates a null value. See *NULL Function*.

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

Transform:

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

```
derive type:single value: ISMISMATCHED (State, 'State')
```

You can test for valid matches for Qty using the following:

```
derive type:single value: (ISVALID (Qty, 'Integer') && (Qty > 0)) as:'valid_Qty'
```

The first transform flags rows 4 and 6 as mismatched.

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

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

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

```
derive type:single value: (ISMISSING(State) || ISMISSING(Qty)) as:'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:

```
derive type:single value: ((mismatched_State == 'true') || (valid_Qty == 'false') || (missing_State_Qty == 'true')) ? NULL() : 'ok' as:'status'
```

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

```
delete row: ISNULL('status')
```

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