

NOT Function

Returns `true` if the argument evaluates to `false`, and vice-versa. Equivalent to the `!` operator.

- The argument can be a literal Boolean, a function returning a Boolean, or a reference to a column containing Boolean values.

Since the function returns a Boolean value, it can be used as a function or a conditional.

NOTE: Within an expression, you might choose to use the corresponding operator, instead of this function. For more information, see *Logical Operators*.

Basic Usage

```
derive type:single value: NOT(customerHappiness > 70) as:'contactCustomer'
```

Output: If the value in the `customerHappiness` column is not greater than 70 then the value in the new `contactCustomer` column is `true`. Otherwise, the value is `false`.

Syntax and Arguments

```
derive type:single value:NOT(value1)
```

Argument	Required?	Data Type	Description
value1	Y	string	The value must be a Boolean literal, column reference, or expression that evaluates to <code>true</code> or <code>false</code> .

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

value1

Expression, column reference or literal that evaluates to a Boolean value.

- Missing or mismatched values generate missing results.

Usage Notes:

Required?	Data Type	Example Value
Yes	Function or column reference returning a Boolean value or Boolean literal	<code>myHeight > 2.00</code>

Examples

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

Example - Logical Functions

This example demonstrate the AND, OR, and NOT logical functions.

- See *AND Function*.
- See *OR Function*.
- See *NOT Function*.

In this example, the dataset contains results from survey data on two questions about customers. The yes/no answers to each question determine if the customer is 1) still active, and 2) interested in a new offering.

Source:

Customer	isActive	isInterested
CustA	Y	Y
CustB	Y	N
CustC	N	Y
CustD	N	N

Transform:

Customers that are both active and interested should receive a phone call:

```
derive type:single value:AND(isActive, isInterested) as:'phoneCall'
```

Customers that are either active or interested should receive an email:

```
derive type:single value:OR(isActive, isInterested) as:'sendEmail'
```

Customers that are neither active or interested should be dropped from consideration for the offering:

```
derive type:single value:AND(NOT(isActive),NOT(isInterested)) as:'dropCust'
```

A savvy marketer might decide that if a customer receives a phone call, that customer should not be bothered with an email, as well:

```
set col:sendEmail value:IF(phoneCall == "TRUE", FALSE, sendEmail)
```

Results:

Customer	isActive	isInterested	dropCust	sendEmail	phoneCall
CustA	Y	Y	FALSE	FALSE	TRUE
CustB	Y	N	FALSE	TRUE	FALSE
CustC	N	Y	FALSE	TRUE	FALSE
CustD	N	N	TRUE	FALSE	FALSE