

Function	Output type	Memory class	Initial value	Parameters	Step function
MATCH	Boolean	Boolean	0	p_0 : Boolean	if currentVal == <i>false</i> && p_0 == <i>true</i> then currentVal.set(<i>true</i>) return true return false
SUMIF	Integer	Integer	0	p_0 : Integer p_1 : Boolean	if p_1 == <i>true</i> && $p_0 \neq 0$ then currentVal.set(currentVal + p_0) return true return false
DAYSBEWEEN	Integer	Extension of integer memory class, with internal date-time attribute ‘start’	<i>null</i>	p_0 : Boolean p_1 : Boolean	if currentVal == <i>null</i> then if currentVal.start == <i>null</i> then if p_0 == <i>true</i> then currentVal.start = event.time else return false if p_1 == <i>true</i> then currentVal.set(event.time - currentVal.start) return true return false

Output type

- Is defined so they can be used correctly in conditions: i.e. SUMIF(a, b) > 2 is allowed but MATCH(c) > 2 is not.
- Including use in nested functions: SUMIF(a , MATCH(b)).

Memory class

- Specifies the class that can hold a value of the output type, with memory instances initiated for each function instance. It has a ‘set’ method to update its value.
- A specific class can be defined for scenarios where extra attributes need to be stored for each function instance (see e.g. DAYSBEWEEN).

Initial value

- When a new function instance is initialised, this defines the value to start with.

- The initial value is usually *false* or 0, but sometimes *null* (e.g. LAST, DAYSBETWEEN).

Parameters

- Predefines how many parameters the function has along with the type of each parameter (in order).
- When defining a function in a condition (e.g. SUMIF($a, b > 2$), this creates an instance of the SUMIF class, where p_0 points to the attribute/expression a and p_1 points to the attribute/expression b .

Step function

- Gets the value of the parameters based on the current event and the domain instance. It is assumed that any nested functions have already been updated.
- Returns *true* if the current value of the function instance memory is changed based on the parameter's values.