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This function maps each value in the given arrays to a new value by application of a LAMBDA function to each value. Sample Usage MAP(A1:A5, LAMBDA(cell, cell*2)): MAP function with range as input. MAP(A1:A5, B1:B5, LAMBDA(cell1, cell2, MAX(cell1, cell2))): MAP function with multiple ranges as input. MAP(UNIQUE(A1:A10), LAMBDA(number, number + 1)): MAP function with array as input. Syntax MAP(array1, [array2, ...], LAMBDA) array1: An array or range to be mapped. array2, ...: [OPTIONAL] Additional arrays or ranges to be mapped. LAMBDA: A LAMBDA function that's mapped to each value in the given arrays to obtain a new mapped value. Syntax: LAMBDA(name1, [name2, ...], formula_expression) Requirements: The LAMBDA must have exactly 1 name argument for each array passed, along with a formula_expression which uses those names. When LAMBDA is applied, the names resolve to the current values being mapped in the passed arrays. Notes The passed LAMBDA function should accept exactly as many name arguments as the number of input arrays given to MAP, otherwise an #N/A error is returned. These arguments correspond to the values in the input arrays which are being mapped to a new value. Values in the input arrays should map to a single value. Array results for mapped values aren't supported. A named function can be passed for the LAMBDA parameter and behaves like a LAMBDA in this case. Learn more about named functions. There should be exactly as many argument placeholders defined for it as the number of input arrays passed to MAP. The named function shouldn't be followed by parenthesis. Examples Simple doubling operation with MAP Example data: A B C D 1 1 2 2 3 4 3 2 4 4 6 8 Example: Input this formula in C3: =MAP(A1:B2, LAMBDA(cell, cell*2)) Map a comma separated values to hyphenated SKU codes Example Data: A B 1 Jeans,Black,XL Jeans-Black-XL 2 Shorts,Brown,S Shorts-Brown-S 3 Tshirt,Red,L Tshirt-Red-L 4 Skirt,Pink,M Skirt-Pink-M Example: Input this formula in B1: =MAP(A1:A4, LAMBDA(item, JOIN("-", SPLIT(item, ",")))) Map multiple input ranges to the max value in each data set Example Data: A B C D E F G H 1 38.9 17.8 42 20.2 38.6 21.2 2 39.2 19.6 37.8 17.1 34.6 21.2 3 34.1 18.1 41.1 17.6 36.6 17.8 Example: =MAP(A1:B3, D1:E3, G1:H3, LAMBDA(valA, valB, valC, MAX(valA, valB, valC))) Result: A B 1 42 21.2 2 39.2 21.2 3 41.1 18.1 Use a named function as a LAMBDA to count cells which have numbers in them Make a Copy Example Data: A B C 1 13 Going On 30 2 Fast 2 Furious 12 Angry Men 2 Eternal Sunshine of the Spotless Mind Friday the 13th No Country for Old Men Named function: CONTAINS_NUMBER is a named function which checks if the given string value contains any number. Formula definition: =ARRAYFORMULA(OR(ISNUMBER(SPLIT(cell, " ")))), where cell is an argument placeholder defined for CONTAINS_NUMBER. Example: =COUNTIF(MAP(A1:C2, CONTAINS_NUMBER), true) Result: Common Errors The dimensions of the input arrays don't match If the dimensions of the input arrays don't match, this error occurs: "Array arguments to MAP are of different size." Example: =MAP(C1:C4, D1:D2, LAMBDA(x, x+1)) In this example, array C1:C4 doesn't match the size of array D1:D2. The passed LAMBDA doesn't have exactly as many name arguments as the number of input arrays If the passed LAMBDA doesn't have exactly as many name arguments as the number of input arrays given to MAP, this error occurs: "Wrong number of arguments to LAMBDA. Expected 3 arguments, but got 2 arguments. Example: =MAP(C1:C4, D1:D4, LAMBDA(cell, cell+1)) In this example, LAMBDA was given only 1 name argument cell, even though we passed 2 arrays to MAP. The last parameter of MAP wasn't a LAMBDA If the last parameter of MAP wasn't a LAMBDA, this error occurs: "Argument must be a LAMBDA." Example: =MAP(C1:C3, 3) The LAMBDA passed to MAP was incorrect If the 1 or more name arguments aren't valid, this error occurs: "Argument 1 of function LAMBDA is not a valid name." Example: =MAP(C1:C3, LAMBDA(C1, C1+1)) In this example, C1 is an invalid name since it clashes with a range. The application of LAMBDA on the input array(s) maps to multiple values or another array If the application of LAMBDA on the input array(s) maps each value to multiple values or another array, this error occurs: "Single value expected. Nested array results are not supported." Example: =MAP(E1, LAMBDA(word, SPLIT(word, " "))) In this example, we try to map the text in the cell to an array of words. Related functions LAMBDA function: This function lets you create and return a custom function with a set of names and a formula_expression that uses them. REDUCE function: This function reduces an array to an accumulated result. BYROW function: This function groups an array by rows. BYCOL function: This function groups an array by columns. SCAN function: This function scans an array and produces intermediate values. MAKEARRAY function: This function creates a calculated array of specified dimensions. Create & use named functions: This function lets users create and store custom functions, similar to LAMBDA. Post to the help community Get answers from community members