How can I use the SEQUENCE function in Excel to create a sequence of numbers according to specified parameters?

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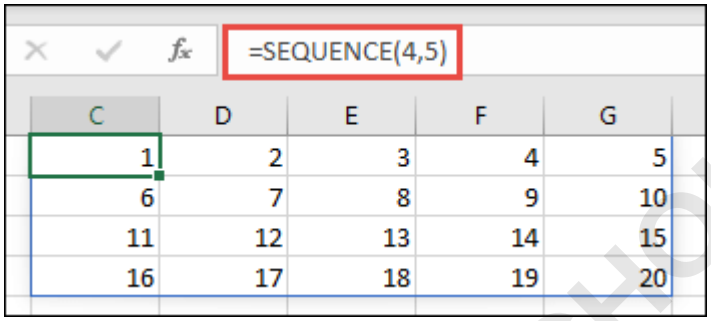
The SEQUENCE function in Excel allows users to generate a sequence of numbers based on specified parameters. By inputting the starting number, increment, and length of the sequence, users can easily create a series of numbers that follow a specific pattern. This can be especially useful for creating numbered lists or filling in data tables. With the SEQUENCE function, users can quickly and accurately generate a sequence of numbers without having to manually type them out. This function is a valuable tool for organizing and analyzing data in Excel.

The SEQUENCE function allows you to generate a list of sequential numbers in an array, such as 1, 2, 3, 4.

In the following example, we created an array that's 4 rows tall by 5 columns wide with **=SEQUENCE(4,5)**.



=SEQUENCE(rows,,,)

Argument	Description
rows Required	The number of rows to return
Optional	The number of columns to return
Optional	The first number in the sequence
Optional	The amount to increment each subsequent value in the array

Notes:

Any missing optional arguments will default to 1. If you omit the rows argument, you must provide at least one other argument.

An array can be thought of as a row of values, a column of values, or a combination of rows and columns of values. In the example above, the array for our SEQUENCE formula is range C1:G4.

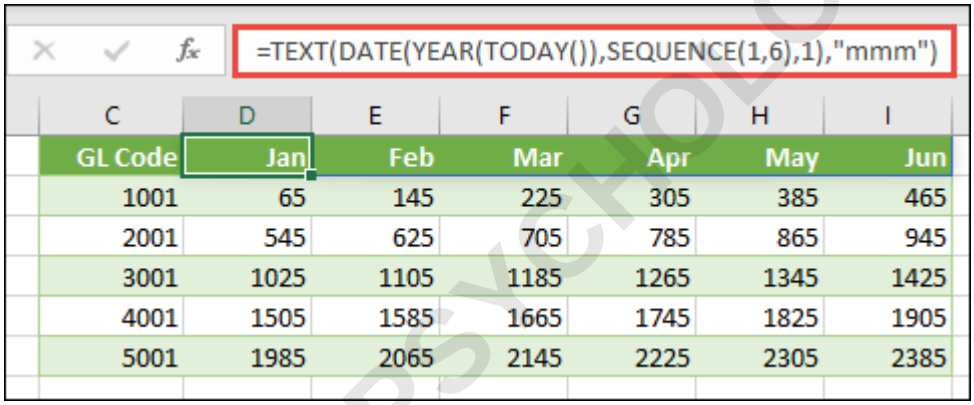
The SEQUENCE function will return an array, which will spill if it's the final result of a formula. This

means that Excel will dynamically create the appropriate sized array range when you press **ENTER**. If your supporting data is in an Excel table, then the array will automatically resize as you add or remove data from your array range if you're using structured references. For more details, see this article on spilled array behavior.

Excel has limited support for dynamic arrays between workbooks, and this scenario is only supported when **both** workbooks are open. If you close the source workbook, any linked dynamic array formulas will return a #REF! error when they are refreshed.

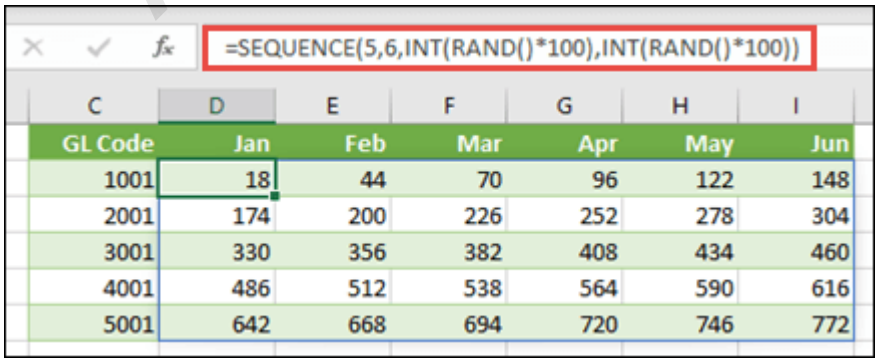
Example

If you need to create a quick sample dataset, here's an example using SEQUENCE with TEXT, DATE, YEAR, and TODAY to create a dynamic list of months for a header row, where the underlying date will always be the current year. Our formula is: **=TEXT(DATE(YEAR(TODAY()),SEQUENCE(1,6),1),"mmm")**.



GL Code	Jan	Feb	Mar	Apr	May	Jun
1001	65	145	225	305	385	465
2001	545	625	705	785	865	945
3001	1025	1105	1185	1265	1345	1425
4001	1505	1585	1665	1745	1825	1905
5001	1985	2065	2145	2225	2305	2385

Here's an example of nesting SEQUENCE with INT and RAND to create a 5 row by 6 column array with a random set of increasing integers. Our formula is: **=SEQUENCE(5,6,INT(RAND()*100),INT(RAND()*100))**.



GL Code	Jan	Feb	Mar	Apr	May	Jun
1001	18	44	70	96	122	148
2001	174	200	226	252	278	304
3001	330	356	382	408	434	460
4001	486	512	538	564	590	616
5001	642	668	694	720	746	772

In addition, you could use **=SEQUENCE(5,1,1001,1000)** to create the sequential list of GL Code numbers in the examples.

Need more help?

You can always ask an expert in the Excel Tech Community or get support in Communities.