Using VLOOKUP in Microsoft Excel or Google Spreadsheet
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Ctrl+F is a keyboard shortcut that many of us are familiar with. We usually use it to find words or phrases quickly and efficiently when reading or browsing through an article on a website. We can also use it in word processing programs, spreadsheets, or even PDFs.

Though Ctrl+F allows us to find specific data in *Microsoft Excel* and *Google Spreadsheets,* its usefulness stops there as we could not manipulate the data any further. In this short article, we will look at how to use VLOOKUP to find and display a particular data when using spreadsheets programs such as *Microsoft Excel* or *Google Spreadsheet.*

Let's start by looking at the syntax

Syntax: =VLOOKUP(**lookup_value**, **table_array**, **col-index-num**, **range_lookup**)

Syntax	Required	Information	Summary
lookup_value	Yes	This value is located in the leftmost column of your data range (i.e., table_array). Lookup function uses this value as the search term.	This is your search term.
table_array	Yes	Also known as a lookup table. You can use absolute reference to 'lock' the table.*	This is your data range.
col-index-num	Yes	This is the number of the column that contains the search result. The leftmost column of your table_array is column 1.	This is the column number that contains the search result.
range_lookup	No	Accepts either TRUE (1) or FALSE (0) value only. By default, it is set to TRUE. Use FALSE or 0 if you want to look for an exact match to your search term. If you use TRUE or 1, sort the leftmost column in ascending order.	Use: 1. FALSE or 0 for exact match. 2. TRUE or 1 for approximate match.

*Note: In *Microsoft Excel* or *Google Spreadsheet,* an absolute reference is a reference that we have fixed its location. We create an absolute reference by adding the $ sign to the row and column reference. For example, to make cell A1 an absolute reference, we will place the $ sign before A and 1 respectively. So,
   a. A1 (relative reference) ➡ $A$1 (absolute reference) and
   b. A2:C7 (relative reference) ➡ $A$2:$C$7 (absolute reference)

You can think of the VLOOKUP function as:

=VLOOKUP(**what to search for**, **where to search in**, **the column number of the search result**, **return exact/approximate match**)

Now, let's look at how to use VLOOKUP

Suppose we have a table as shown in Figure 1. We can use the VLOOKUP function to find and display the marks of a particular student.

G4 contains the following formula: =VLOOKUP($G$3, $A$2:$C$7, 2, FALSE)

Figure 1

In this formula:

1. **lookup_value (what to search for)**
➡ $G$3 (i.e., a (fixed) cell with a value, Diana)
2. **table_array (where to search in)**
➡ $A$2:$C$7 (i.e., a fixed range starting from A2 to C7)
3. **col-index-num (the column number of the search result)**
➡ 2 (i.e., column B is the column in which the search result is located)
4. **range_lookup (return exact/approximate match)**
➡ FALSE (i.e., look for an exact match)

Can you guess the formula in G5?

Yes, the formula in G5 is =VLOOKUP($G$3, $A$2:$C$7, 3, FALSE).

And if you change the name (Diana) in G3 to any other names listed in A2:A7, you will get the corresponding listening (in G4) and speaking marks (in G5).

Using VLOOKUP to find information from a table located on a different sheet

To do this, add the name of the sheet (enclosed in single quotation marks) followed by an exclamation mark before the **table_array**.

Let's say the table shown in Figure 1 is on a sheet named 'Assessment' and the contents of F3:G5 is on another sheet named 'Search_Info' (see Figure 2).

Figure 2

Figure 2 shows two different sheets:

 a. Assessment – on which the data is found, and
 b. Search_Info – on which the listening and speaking marks of individual student are displayed

Note that the VLOOKUP formula in cell G4 on the Search_Info sheet has been changed from:

the original =VLOOKUP(**$G$3**, **$A$1:$C$7**, **2**, **FALSE**)

to =VLOOKUP(**$G$3**, **'Assessment '!$A$1:$C$7**, **2**, **FALSE**)

> The name of the sheet enclosed in single quotation marks followed by an exclamation mark have been added to table_array

Caution

When using VLOOKUP, here are some issues you have to remember:

1. The **lookup_value** must be the left-most column of your **table_array** (lookup table) i.e., the first column of your data range.

2. The content of **lookup_value** must be a cell reference, e.g.: G3. If you want to use a text, you must en-

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close the text in single quotation marks, e.g.: 'Diana'.

3. Are you using absolute reference instead of relative reference?

4. Is the table_array (lookup table) on the same sheet or a different one?

5. For col-index-num, are you pointing to the correct column in the table_array (lookup table)?

6. For range_lookup, use FALSE for the exact match.

7. If you use TRUE in range_lookup, you must ensure that the first column of the table_array is sorted in ascending order.

Conclusion

VLOOKUP is a very useful function that we can use to find and display data. Try using it in your *Microsoft Excel* or *Google Spreadsheet.* I am sure you will be an expert of VLOOKUP in no time. Good luck and adios…