Search, Find, Sort and Filter In Excel®

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Search, Find, Sort and Filter

Search and Find

There are two very similar functions in Excel to look for data inside of cells matching the parameters that you state: Let’s look at the differences.

SEARCH

The SEARCH function is a way to find a character or string within another cell, and it will return the value associated with the starting place. In other words, if you are trying to figure out where a character is within the cell that contains a word, sentence or other type of information, you could use the SEARCH function. The format for this function is: =SEARCH("find_text","within_text",start_num).

For example, the word "alphabet" was in cell C2, and your model needed the location of the letter "a" in that cell, you would use the formula =SEARCH("a",C2,1), and the result would be 1. To continue this simplistic example, if you were seeking the location of "b" in the word, the formula would be =SEARCH("b",C2,1), and the result would be 6. You can also use search on strings of characters. If, for example, cell F2 contains 1023-#555-A123, the formula =SEARCH("A12",F2,1) would yield the 11 as an answer.

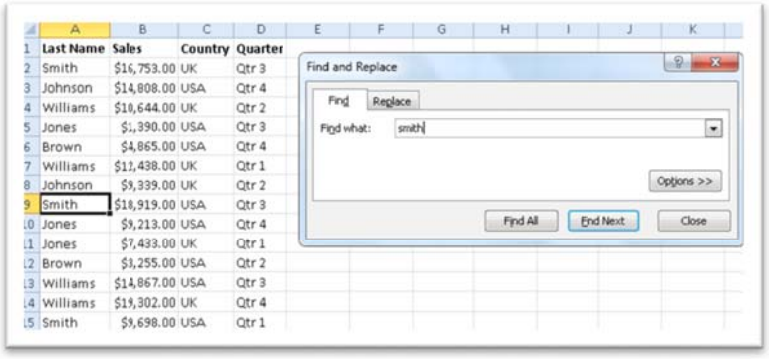
FIND

The FIND function is another way to find a character or string within another cell, and it will return the value associated with the starting place, just like the SEARCH function. The format for this function is:

=FIND("find_text","within_text",start_num).

Using the same example as before, the location of the letter "a" in cell C2 would be discovered using =FIND("a",C2,1), and the result would be 1. Looking for "b" in cell C2 would be accomplished be =FIND("b",C2,1), resulting in the number 6. Finally, continuing on the similarity path, if cell F2 contains 1023-#555-A123 (as before), the formula =FIND("A12",F2,1) would yield the 11 as an answer. As you can see, up to this point, both methods would give you the same results.

However, you probably saw that there are two a's in the word located in cell C2. By stating the starting point in each of the formulas as 1, we will pick up the first instance of the letter "a". If we needed to choose the next instance, we could merely have the "start_num" part of the formula to be 2, thus skipping the first instance of the letter and resulting in an answer of 5.



Another way is to use the “Find and Replace” command: <CNTRL> + <F>.

Sorting Data

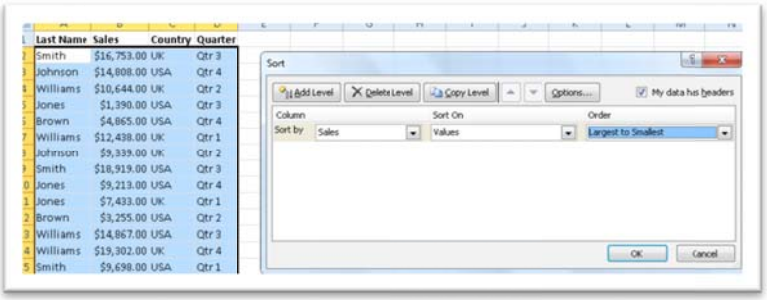
1. Open the DATA menu and select Sort. The Sort dialog box appears.
2. Select the Continue with the Current Selection option to sort a single column or row.
3. Select the Expand the Selection option to sort a series of columns or rows.
4. Choose Ascending or Descending to determine the sort order.
5. Click the Options button in the Sort dialog box.
6. Select "Sort top to bottom" in the Sort Options dialog box to sort a column.
7. Select "Sort left to right" in the Sort Options dialog box to sort a row.
8. Click OK in the Sort Options dialog box.
9. Click OK in the Sort dialog box

	A	B	C	D
1	Last Name	Sales	Country	Quarter
2	Smith	$16,753.00	UK	Qtr 3
3	Johnson	$14,808.00	USA	Qtr 4
4	Williams	$10,644.00	UK	Qtr 2
5	Jones	$1,390.00	USA	Qtr 3
6	Brown	$4,865.00	USA	Qtr 4
7	Williams	$12,438.00	UK	Qtr 1
8	Johnson	$9,339.00	UK	Qtr 2
9	Smith	$18,919.00	USA	Qtr 3
10	Jones	$9,213.00	USA	Qtr 4
11	Jones	$7,433.00	UK	Qtr 1
12	Brown	$3,255.00	USA	Qtr 2
13	Williams	$14,867.00	USA	Qtr 3
14	Williams	$		
15	Smith			

	A	B	C	D
1	Last Name	Sales	Country	Quarter
2	Williams	$19,302.00	UK	Qtr 4
3	Smith	$18,919.00	USA	Qtr 3
4	Smith	$16,753.00	UK	Qtr 3
5	Williams	$14,867.00	USA	Qtr 3
6	Johnson	$14,808.00	USA	Qtr 4
7	Williams	$12,438.00	UK	Qtr 1
8	Williams	$10,644.00	UK	Qtr 2
9	Smith	$9,698.00	USA	Qtr 1
10	Johnson	$9,339.00	UK	Qtr 2
11	Jones	$9,213.00	USA	Qtr 4
12	Jones	$7,433.00	UK	Qtr 1
13	Brown	$4,865.00	USA	Qtr 4
14	Brown	$3,255.00	USA	Qtr 2
15	Jones	$1,390.00	USA	Qtr 3

Here we see the spreadsheet before the sort and below the sort command dialog box.

I want to sort the spreadsheet based on highest sales by last name.



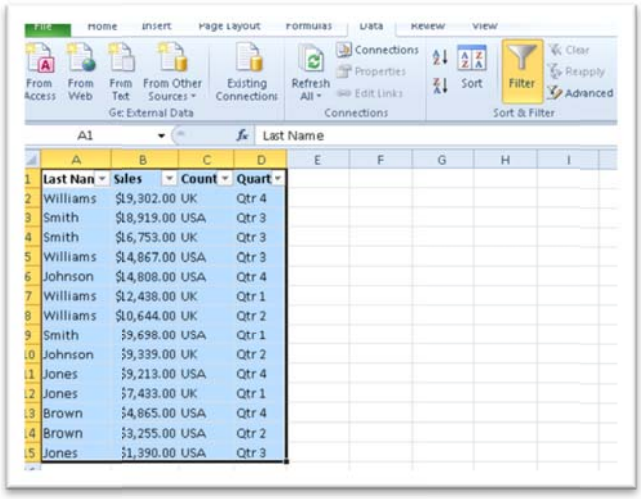
After the sort.

Filtering Data

In this example I want only the sales by the salesperson Williams and I would like to sort it by quarter. Here we go:

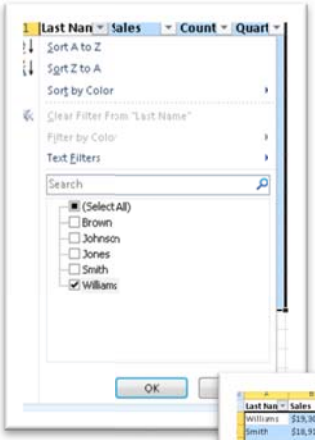
	A	B	C	D
1	Last Name	Sales	Country	Quarter
2	Williams	$19,302.00	UK	Qtr 4
3	Smith	$18,919.00	USA	Qtr 3
4	Smith	$16,753.00	UK	Qtr 3
5	Williams	$14,867.00	USA	Qtr 3
6	Johnson	$14,808.00	USA	Qtr 4
7	Williams	$12,438.00	UK	Qtr 1
8	Williams	$10,644.00	UK	Qtr 2
9	Smith	$9,698.00	USA	Qtr 1
10	Johnson	$9,339.00	UK	Qtr 2
11	Jones	$9,213.00	USA	Qtr 4
12	Jones	$7,433.00	UK	Qtr 1
13	Brown	$4,865.00	USA	Qtr 4
14	Brown	$3,255.00	USA	Qtr 2
15	Jones	$1,390.00	USA	Qtr 3

I have highlighted the entire data set because I'm not sure where all the data is.

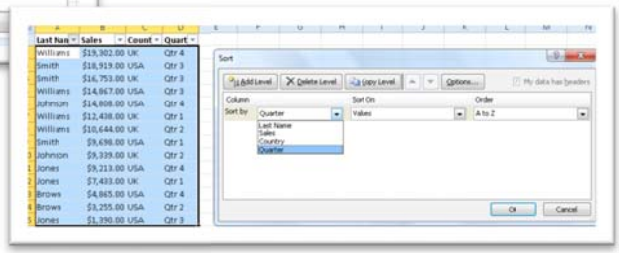


	A	B	C	D
1	Last Nan	Sales	Count	Quart
2	Williams	$19,302.00	UK	Qtr 4
3	Smith	$18,919.00	USA	Qtr 3
4	Smith	$16,753.00	UK	Qtr 3
5	Williams	$14,867.00	USA	Qtr 3
6	Johnson	$14,808.00	USA	Qtr 4
7	Williams	$12,438.00	UK	Qtr 1
8	Williams	$10,644.00	UK	Qtr 2
9	Smith	$9,698.00	USA	Qtr 1
10	Johnson	$9,339.00	UK	Qtr 2
11	Jones	$9,213.00	USA	Qtr 4
12	Jones	$7,433.00	UK	Qtr 1
13	Brown	$4,865.00	USA	Qtr 4
14	Brown	$3,255.00	USA	Qtr 2
15	Jones	$1,390.00	USA	Qtr 3

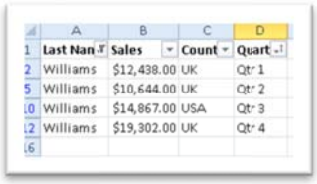
I have clicked the <FILTER> icon under the "DATA" tab. Note the little arrows on the label row.



Clicking the arrow on the "Last Name" column gives me the choice of items. I can choose one or several last names. Here I've chosen "Williams". I also want to search not only by "Williams" but also by "Quarter". I will expand the command "Sort by Color" which gives me another dialog box.



Here is the completed sort and filter. From here, we can take this data and based on total sales from all of the sales people per quarter, provide the Sales Manager with a modeled projection of what Williams' sales might be in the 1st quarter of the next year.



	A	B	C	D
1	Last Nan	Sales	Count	Quart
2	Williams	$12,438.00	UK	Qtr 1
5	Williams	$10,644.00	UK	Qtr 2
10	Williams	$14,867.00	USA	Qtr 3
12	Williams	$19,302.00	UK	Qtr 4
16				

VLOOKUP function

You can use the **VLOOKUP** function to search the first column of a range of cells, and then return a value from any cell on the same row of the range. For example, suppose that you have a list of employees contained in the range A2:C10. The employees' ID numbers are stored in the first column of the range, as shown in the following illustration.

	A	B	C
1	**Employee ID**	**Department**	**Full Name**
2	35	Sales	Yossi Banai
3	36	Production	Nicole Bousseau
4	37	Sales	Aik Chen
5	38	Operations	Axel Delgado
6	39	Sales	Suroor Fatima
7	40	Production	Gerhard Goeschl
8	41	Sales	Andreas Hauser
9	42	Operations	Nattorn Jayanama
10	43	Production	Jim Kim

If you know the employee's ID number, you can use the **VLOOKUP** function to return either the department or the name of that employee. To obtain the name of employee number 38, you can use the formula **=VLOOKUP(38, A2:C10, 3, FALSE)**. This formula searches for the value 38 in the first column of the range A2:C10, and then returns the value that is contained in the third column of the range and on the same row as the lookup value ("Axel Delgado").

The V in **VLOOKUP** stands for vertical. Use **VLOOKUP** instead of **HLOOKUP** when your comparison values are located in a column to the left of the data that you want to find.