Excel 2010: Database Management

Bravo! Employee Summer Institute 2011

Database Management in Excel 2010

Table of Contents

Database Management in Excel 2010

Database Management in Excel 2010

Excel 2010 gives you the ability to work with an **enormous amount of data**. Arranging your data alphabetically, from smallest to largest or other criteria can help you find the information you're looking for more quickly.

To Sort in Alphabetical Order:

1. Select a cell in the column you want to sort by. In this example, we will sort by Last Name.

	A	B	C	D	E	F	G
1	Last Name	First Name	Department	Office Location	Extension	Bonus	
2	Barry	Angela	Accounting	3g	2667	$ 500.00	
3	Boller	Mary	Development	8d	2544	$ 501.00	
4	Chaffee	Adam	Accounting	10a	2678	$ 503.00	
5	Chase	Fred	Human Resources	8b	2511	$ 504.00	
6	Chu	Laurie	Human Resources	2d	2055	$ 505.00	
7	Chung	Bob	Development	8e	2547	$ 506.00	
8	Clark	Anna	Engineering	11c	2770	$ 507.00	
9	Clark	John	Development	2c	2546	$ 508.00	
10	Clarke	Joe	Engineering	11d	2776	$ 509.00	
11	Cole	Daniel	Accounting	4c	2066	$ 510.00	

Selecting a column to sort

2. Select the **Data** tab, and locate the **Sort and Filter** group.

3. Click the ascending command ᴬᶻ↓ to **Sort A to Z**, or the descending command ᶻᴬ↓ to **Sort Z to A**.
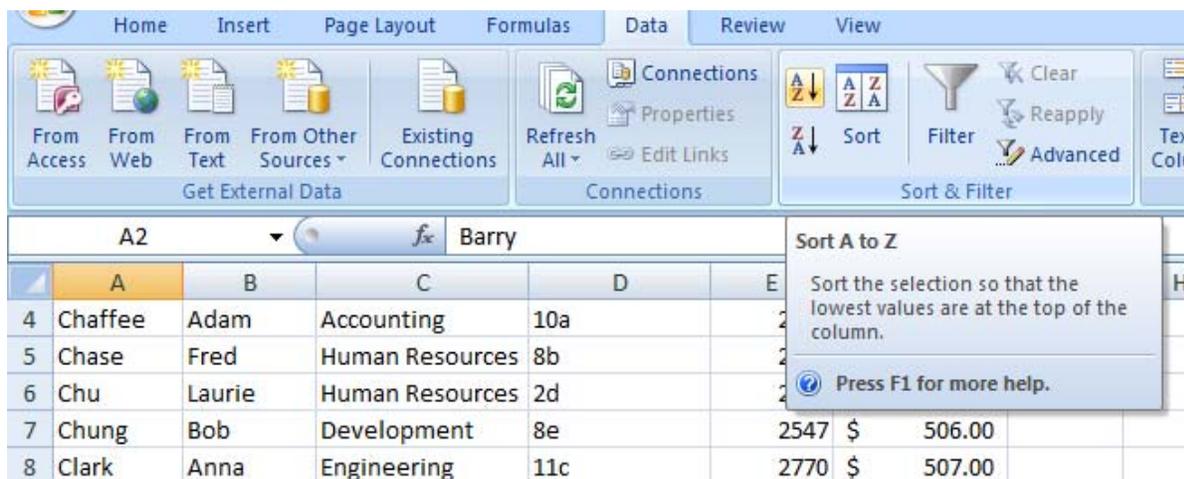
4.

Sorting in ascending alphabetical order

Database Management in Excel 2010

5. The data in the spreadsheet will be organized alphabetically.

	A	B	C	D	E	F	G
1	Last Name	First Name	Department	Office Location	Extension	Bonus	
2	Barry	Angela	Accounting	3g	2667	$ 500.00	
3	Boller	Mary	Development	8d	2544	$ 501.00	
4	Chaffee	Adam	Accounting	10a	2678	$ 503.00	
5	Chase	Fred	Human Resources	8b	2511	$ 504.00	
6	Chu	Laurie	Human Resources	2d	2055	$ 505.00	
7	Chung	Bob	Development	8e	2547	$ 506.00	
8	Clark	Anna	Engineering	11c	2770	$ 507.00	
9	Clark	John	Development	2c	2546	$ 508.00	
10	Clarke	Joe	Engineering	11d	2776	$ 509.00	
11	Cole	Daniel	Accounting	4c	2066	$ 510.00	
12	Comuntzis	Mark	Executive	6a	2089	$ 511.00	
13	Decker	Erica	Accounting	9e	2665	$ 512.00	
14	Donnell	Susan	Accounting	3d	2688	$ 514.00	
15	Ellis	Janet	Customer Service	2f	2109	$ 515.00	
16	Fern	Elizabeth	Accounting	10b	2700	$ 516.00	
17	Ferris	Jim	Human Resources	3c	2478	$ 517.00	
18	Filosa	Alexandra	Facilities	6b	2110	$ 518.00	
19	Flanders	Elizabeth	Engineering	1a	2046	$ 502.00	
20	Grant	Sabrina	Development	12d	2967	$ 519.00	
21	Paul	John	Customer Service	2f	2109	$ 515.00	
22	Sanchez	Barbara	Tech. Support	2e	2099	$ 513.00	
23							

Sorted by last name, from A to Z

Sorting options can also be found on the Home tab, condensed into the **Sort & Filter** command.

Database Management in Excel 2010

To Sort in Numerical Order:

1. Select a cell in the column you want to sort by.

	A	B	C	D	E	F
1	Last Name	First Name	Department	Office Location	Extension	Bonus
2	Flanders	Elizabeth	Engineering	1a	2046	$ 502.00
3	Chu	Laurie	Human Resources	2d	2055	$ 505.00
4	Cole	Daniel	Accounting	4c	2066	$ 510.00
5	Comuntzis	Mark	Executive	6a	2089	$ 511.00
6	Sanchez	Barbara	Tech. Support	2e	2099	$ 513.00
7	Ellis	Janet	Customer Service	2f	2109	$ 515.00
8	Paul	John	Customer Service	2f	2109	$ 515.00
9	Filosa	Alexandra	Facilities	6b	2110	$ 518.00
10	Ferris	Jim	Human Resources	3c	2478	$ 517.00
11	Chase	Fred	Human Resources	8b	2511	$ 504.00
12	Boller	Mary	Development	8d	2544	$ 501.00
13	Clark	John	Development	2c	2546	$ 508.00
14	Chung	Bob	Development	8e	2547	$ 506.00
15	Decker	Erica	Accounting	9e	2665	$ 512.00
16	Barry	Angela	Accounting	3g	2667	$ 500.00
17	Chaffee	Adam	Accounting	10a	2678	$ 503.00
18	Donnell	Susan	Accounting	3d	2688	$ 514.00
19	Fern	Elizabeth	Accounting	10b	2700	$ 516.00
20	Clark	Anna	Engineering	11c	2770	$ 507.00
21	Clarke	Joe	Engineering	11d	2776	$ 509.00
22	Grant	Sabrina	Development	12d	2967	$ 519.00
23						

Selecting a column to sort

2. From the **Data** tab, click the **ascending command** Z↓ to **Sort Smallest to Largest**, or the **descending command** A↓ to **Sort Largest to Smallest**.

3. The data in the spreadsheet will be organized numerically.

|	A	B	C	D	E	F
1	Last Name	First Name	Department	Office Location	Extension	Bonus
2	Grant	Sabrina	Development	12d	2967	$ 519.00
3	Clarke	Joe	Engineering	11d	2776	$ 509.00
4	Clark	Anna	Engineering	11c	2770	$ 507.00
5	Fern	Elizabeth	Accounting	10b	2700	$ 516.00
6	Donnell	Susan	Accounting	3d	2688	$ 514.00
7	Chaffee	Adam	Accounting	10a	2678	$ 503.00
8	Barry	Angela	Accounting	3g	2667	$ 500.00
9	Decker	Erica	Accounting	9e	2665	$ 512.00
10	Chung	Bob	Development	8e	2547	$ 506.00
11	Clark	John	Development	2c	2546	$ 508.00
12	Boller	Mary	Development	8d	2544	$ 501.00
13	Chase	Fred	Human Resources	8b	2511	$ 504.00
14	Ferris	Jim	Human Resources	3c	2478	$ 517.00
15	Filosa	Alexandra	Facilities	6b	2110	$ 518.00
16	Ellis	Janet	Customer Service	2f	2109	$ 515.00
17	Paul	John	Customer Service	2f	2109	$ 515.00
18	Sanchez	Barbara	Tech. Support	2e	2099	$ 513.00
19	Comuntzis	Mark	Executive	6a	2089	$ 511.00
20	Cole	Daniel	Accounting	4c	2066	$ 510.00
21	Chu	Laurie	Human Resources	2d	2055	$ 505.00
22	Flanders	Elizabeth	Engineering	1a	2046	$ 502.00
23						

Database Management in Excel 2010

Sorting Multiple Levels

Another feature of custom sorting, **sorting multiple levels** allows you to identify which columns to sort by and when, giving you more control over the organization of your data. For example, you could sort by more than one cell color (such as red, then yellow, then green, to indicate different levels of priority); or, as seen here, sort students by homeroom number, then by last name.

To Add a Level:

1. From the **Data** tab, click the **Sort** command to open the **Sort** dialog box.

2. Identify the first item you want to **Sort by**. In this example, we will sort Homeroom # from Smallest to Largest.

3. Click **Add Level** to add another item.
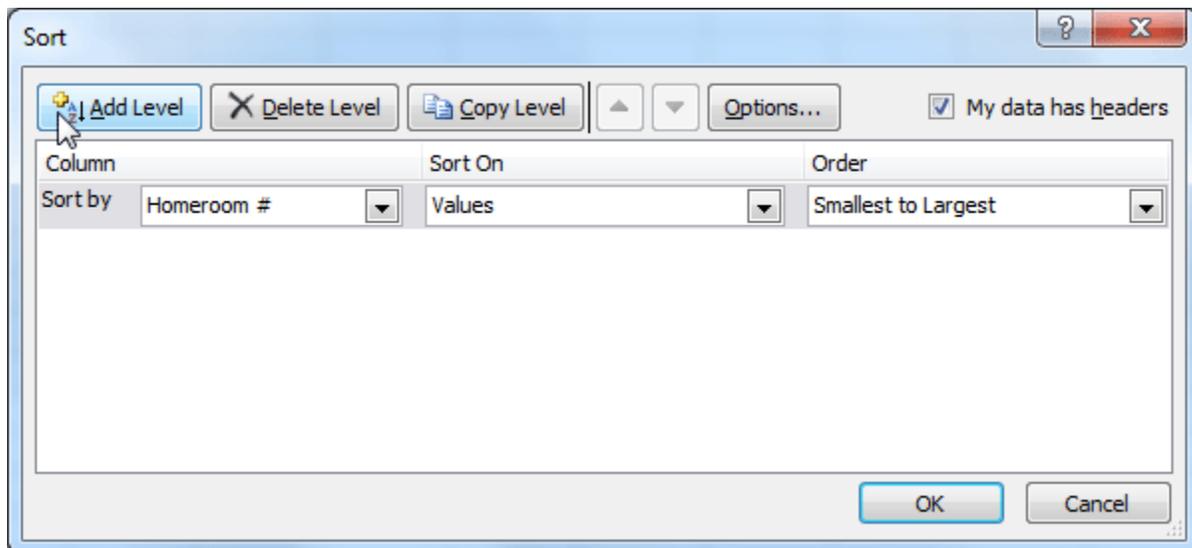
Adding a level

4. Identify the item you want to sort by next in the example shown below: Sort on Last Name from A to Z.

Choosing criteria for a second level
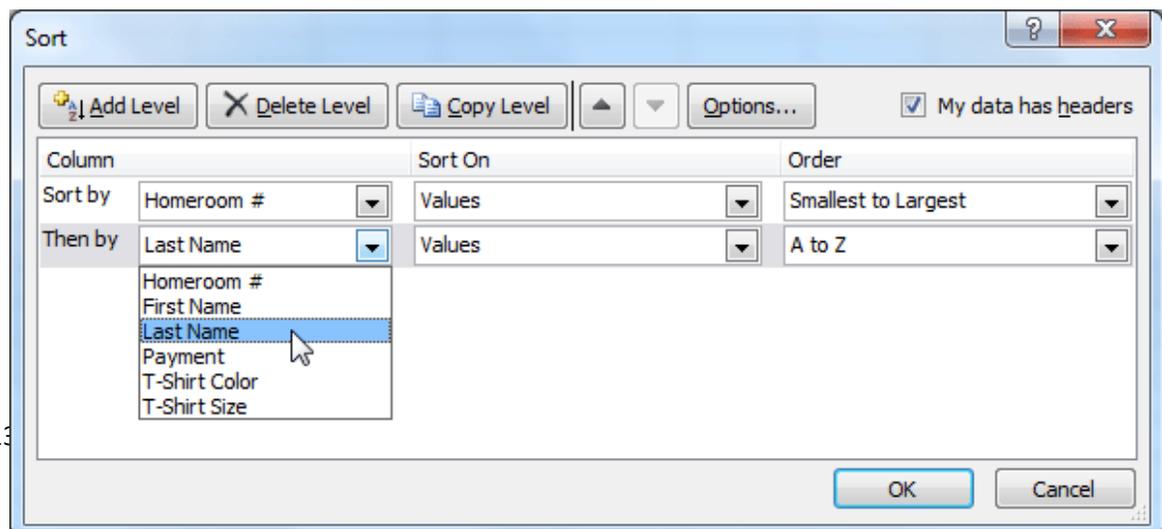
Database Management in Excel 2010

5. Click **OK**.

6. The spreadsheet will be sorted so that homeroom numbers are in order, and within each homeroom, students are listed alphabetically by last name.

	A	B	C
1	**Homeroom #**	**First Name**	**Last Name**
2	105	Nathan	Albee
3	105	Christiana	Chen
4	105	Sidney	Kelly
5	105	Derek	MacDonald
6	105	Melissa	White
7	105	Esther	Yaron
8	110	Kris	Ackerman
9	110	Matt	Benson
10	110	Gabriel	Del Toro
11	110	Regina	Olivera
12	135	Anisa	Naser
13	135	James	Panarello
14	135	Lia	Richards
15	135	Jordan	Weller
16	135	Chantal	Weller
17	135	Alex	Yuen

Sorted by multiple levels

Copy Level will add a level by duplicating the one you have selected, and allowing you to modify the sorting criteria. This is useful if you need to sort multiple levels that share some criteria, such as the same Column, Sort On, or Order.

To Change the Sorting Priority:

1. From the **Data** tab, click the **Sort** command to open the **Custom Sort** dialog box.

2. Select the **level** you want to re-order.

3. Use the **Move Up** or **Move Down** arrows. The higher the level is on the list, the higher its priority.
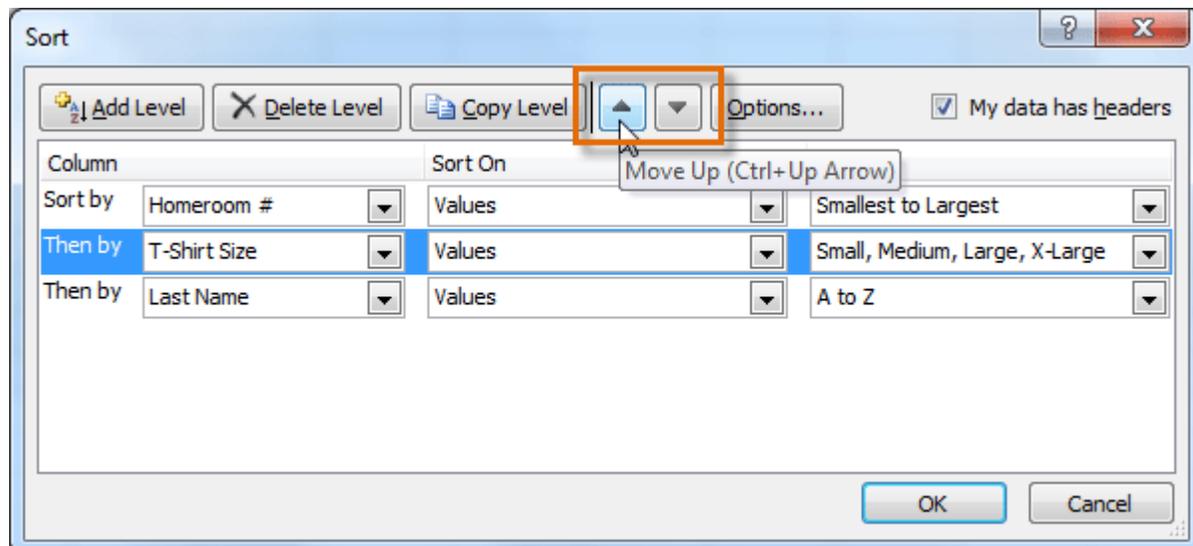
Database Management in Excel 2010

        Changing the sorting priority

    4. Click **OK**.

Data Integrity

Restricting Cell Entries to Certain Data Types

1. Open the file that contains the data you wish to use restrict.
2. Select the Cells

3. On the Data Tab, in the Data tool group, click Data Validation.
4. On the Settings tab of the Data Validation dialog box, click on Whole number in the Allow box.
5. Type in a number for the Minimum box and another number in the Maximum box.

Database Management in Excel 2010

6. Click on the Error Alert tab. Type in text into the Title box.
7. Click in the message area box and type in the "error message"
8. Click on OK when finished.
9. To test that your validation rule see if it is working fine.
10. Enter a number greater or smaller than the range you specify.

> ✚ Depending on what you choose for the style you will get different results:

- Stop

- Warning

- Information

Database Management in Excel 2010
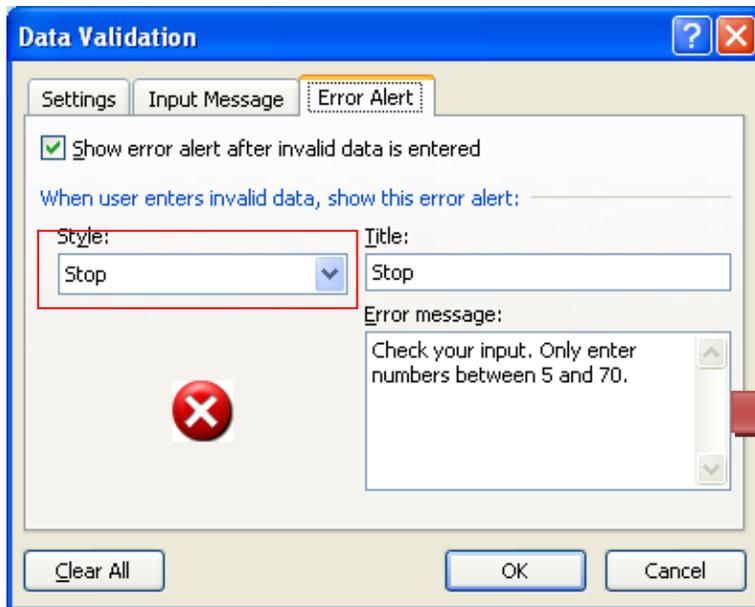
It would **NOT** allow you to enter any other number that is not within the range of accepted numbers. Retry to enter new number or cancel to keep original number
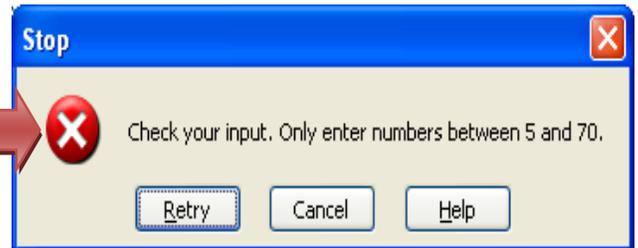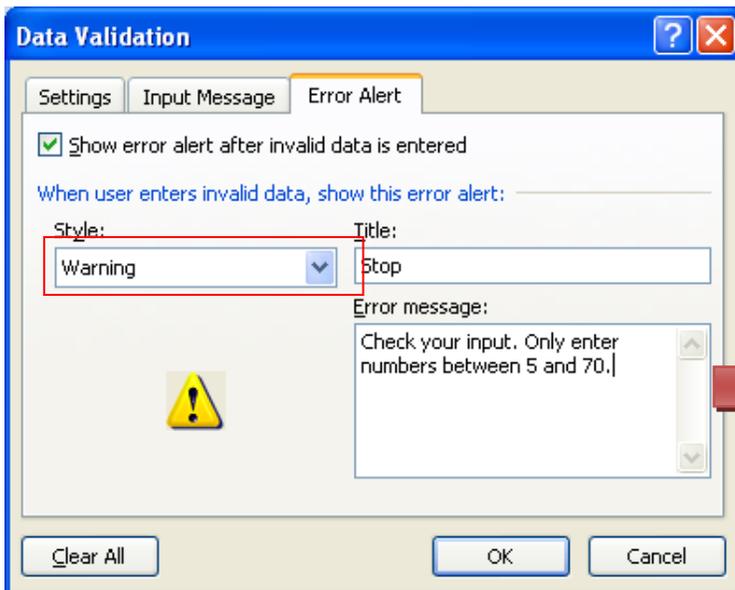

It **WOULD** allow you to enter any other number that is not within the range of accepted numbers by pressing Yes to continue. If you choose NO it would prompt you enter another number (cell highlighted in black). Click on Cancel to keep original number.
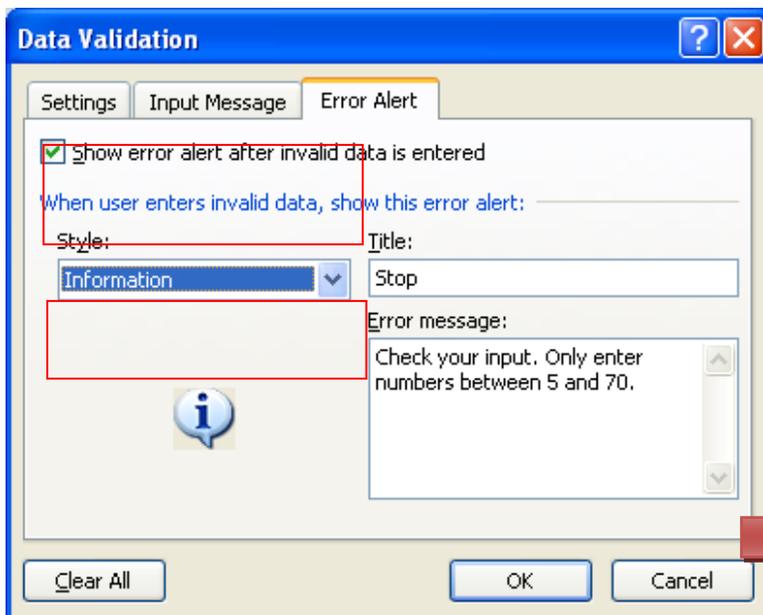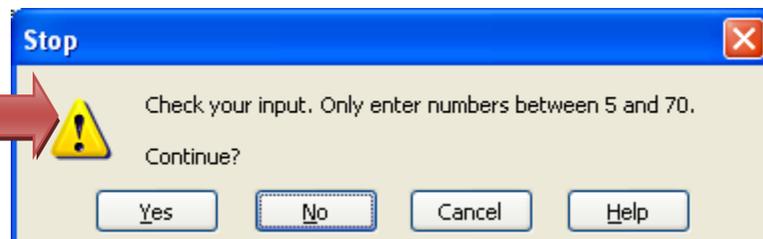

It **WOULD** allow you to enter any other number that is not within the range of accepted numbers by pressing OK. Click on Cancel to keep original number.

Creating Filters
Click inside a table, and then choose Filter in the Sort & Filter group of the Data tab.
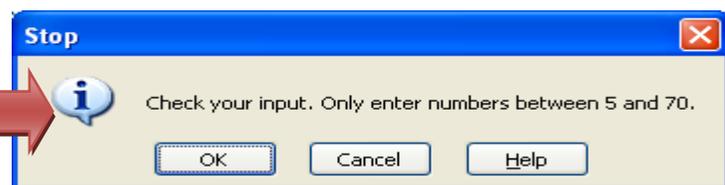
Database Management in Excel 2010
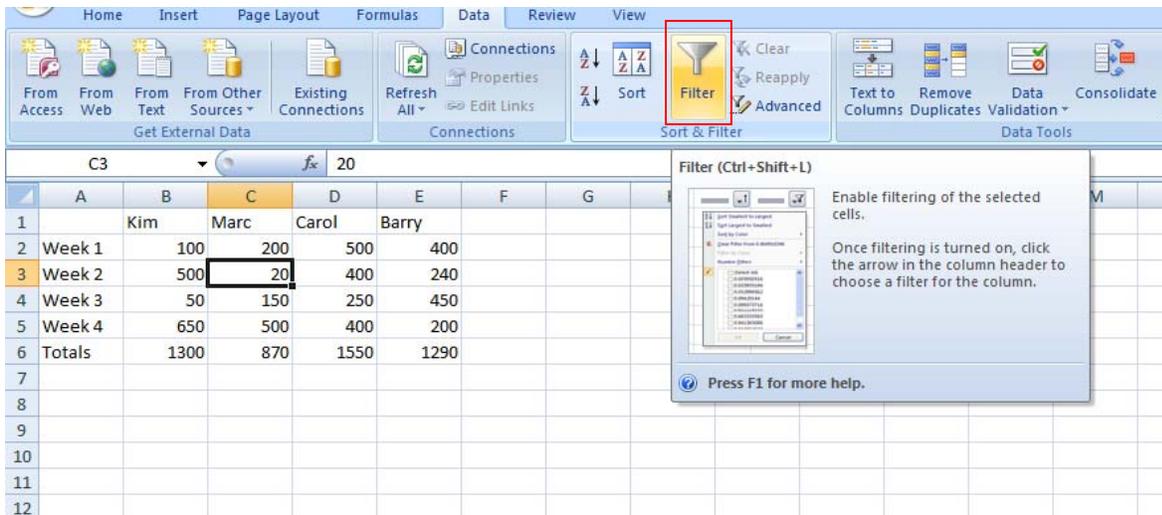
Click the filter arrow beside the column heading for the column you want to filter.
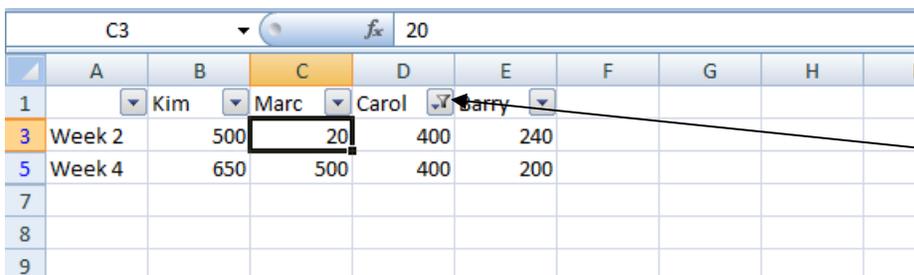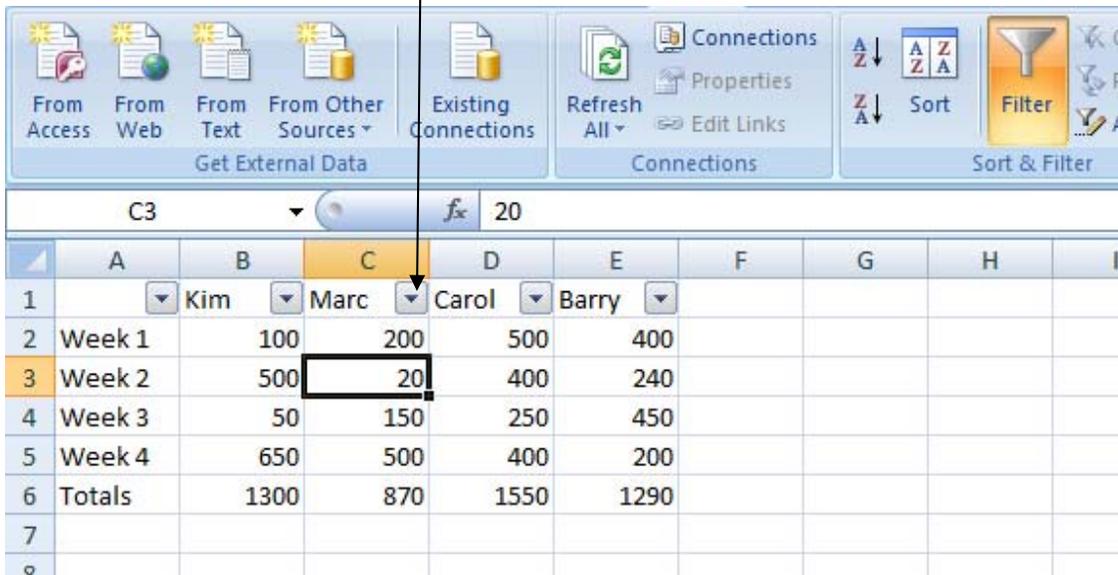
Example of Carol filter for 400.

Database Management in Excel 2010

Remove the check mark from Select All.

Click on Clear Filter from "Carol"(or what was use for the Filter).