Excel Intermediate-Microsoft Excel 2010

Workshop Objectives

1. Import data: csv files and pasting from the internet
2. Data manipulation
3. Sorting
4. Advanced sorting
5. Filtering
6. Find duplicate records
7. If/Else Examples (Find unique records)

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1. Importing Data into Excel

You can bring data into Excel that was saved in various file formats from other applications. As excel is great at crunching numbers and creating graphical representations, importing data can allow for extending capabilities beyond what the source program had.

Exercise 1: Importing a .csv file

1. Select **Data** ribbon > **Get External Data** group > **From Text**
2. Browse for the desired file and click **Import** (Excel data for import.txt)
3. Verify Delimited is selected and click **Next**
4. Verify that the **Delimiter** is set on **Tab** and click **Next**
5. This step allows you to go through your columns and select the data format

   ** (select **Text** for columns of numbers that begin with zero)
6. Click **Finish** and **OK**
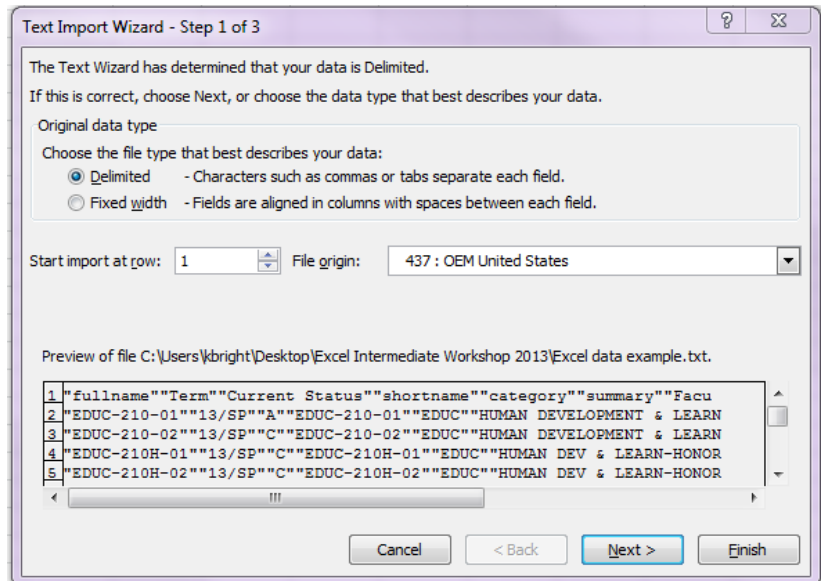
Pasting Data from my.sbu or WebAdvisor - Example

1. Select all the data that you will be copying
2. click paste - **don't click in the spreadsheet**
3. in the bottom right-hand corner look for the **Clipboard**
4. Click on the clipboard and select "**Match destination formatting**"
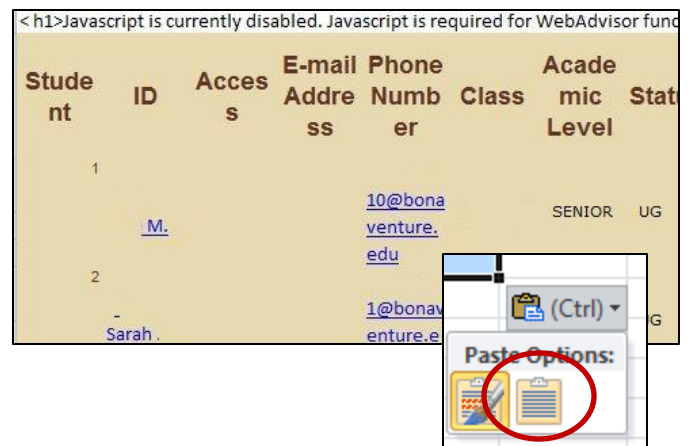
2. Time Saving Ways to Manipulate Data

Many times the data that you get from other sources is not in the format that you need it to be. In this section we will look at some easy ways to manipulate the date to the way you want it.

Exercise 2: Text to Columns

1. Click on the **Sales Data 2003-05** spreadsheet
2. Click in cell **C1** and **Insert 2 columns**
3. Title the new column, **First Name** and Change Salesperson to **Last Name**
4. Click on "**B**" in the **Header Row** to select the entire column
5. Click on the **Data tab** and **Text to Columns**
6. The Text to Columns wizard opens up -- on the first screen make sure **Delimited** is selected and click **Next**
7. Check the box next to **Comma** (look at the preview pane and notice how the text is separated) and click **Next**
8. On the last screen you can choose a format for your columns if you wish – Click **Finish**
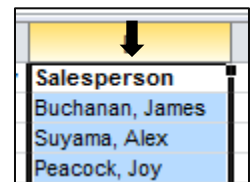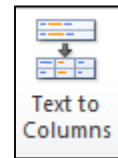
You now have the first and last names in separate columns – this is a great tool if you import data and it doesn't import in columns.

Exercise 3: Find and Replace

1. Using the **Sales Data 2003-05** spreadsheet, click on Find & Select and then Replace.
2. Type 2003 in the **Find what:** text box
3. Type 2013 in the **Replace with:** text box
4. Click the **Replace** or **Replace All**
5. You should get a dialog box telling you how many items were replaced
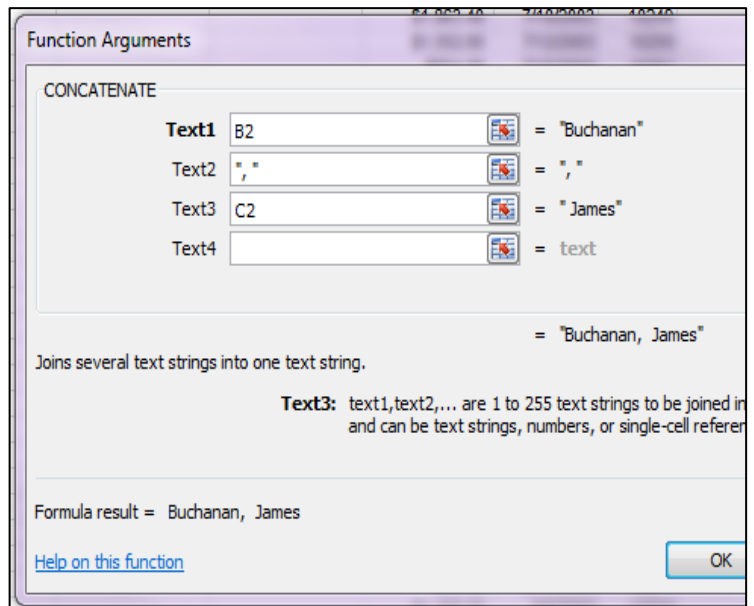6. Click **OK**
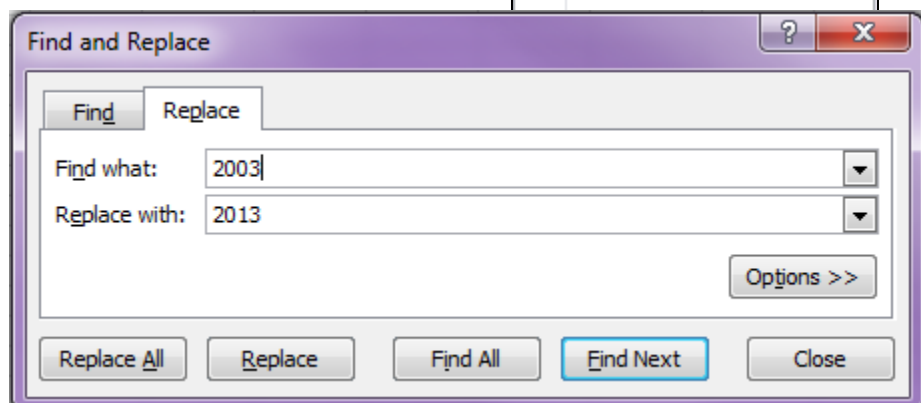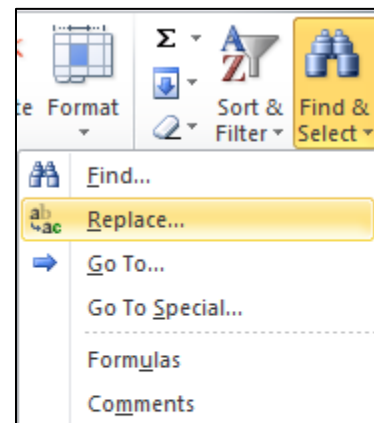
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Exercise 4: Concatenate

Occasionally rather than have the data separated as we did above you need put together in the same column. For this demo we will create a column with the last name, first name or first salesperson will then be shown as Buchanan, James.

1. On the **Sales data 2003-05** spreadsheet, add another column to the right of the first name.
2. Put your cursor in cell **D1** to make it the active cell.
3. Click on the **Formulas Tab**, from the "Function Library" group click on **Text** and then **Concatenate**.
4. You will get the dialog box shown below, with your cursor blinking in the "**Text1**" field.
5. Click in cell **B2**
6. Move your cursor to "**Text2**" type a **comma** and add a **blank space**
7. Move your cursor to the "**Text3**" field and click in cell **C2**
8. Your "Function Arguments" dialog box should look like this
9. Click the OK to enter the formula into the cell.
10. Use the **Fill Handle** to copy your formula to the rest of the column

Now let's get rid of the formula and just keep the results:

11. While the names are still selected, click on the **Home tab** and then the **Copy** button
12. Click in the blank column next to the copied cells and paste
13. At the bottom of the list, you will see the **paste icon** – click on the **Paste Values** icon.
14. Click on one of the names that you just pasted and notice that **only** the name appears in the formula bar.

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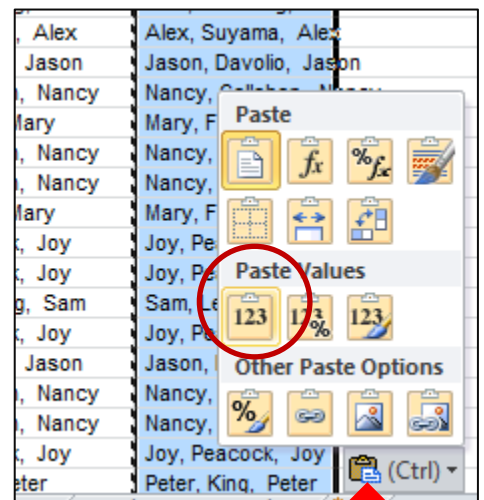
3. Sorting

In Excel a **List** is a collection of similar data stored in a structured manner, rows and columns. Managing lists of data, such as student records, can be time consuming and difficult. Using an Excel worksheet to manage the data or list makes the task easier. One of the great features of Excel is the ability to sort records in various ways and by multiple fields. The fields you use to order your data are called **sort fields** or **sort keys** (Last Name is an example of a sort field). The quickest way to sort data in Excel is to use the **Sort A to Z** or **Sort Z to A** buttons found in the **Editing** group on the **Home tab**. You can also use **Custom Sort** feature to sort your data on more than one field.
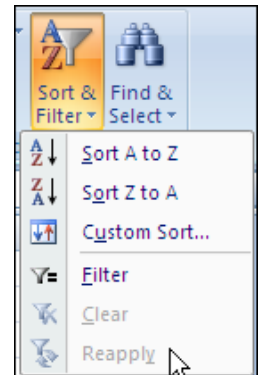
Exercise 5: Sort a List using a single Sort Field

1. Using the **Employee Records** worksheet
2. Click any cell in the **Last Name** column. You do not need to select the entire column. Excel automatically determines the range of the list when you click any cell inside the list.
3. Click the **Sort & Filter button** on the Home tab and then click "**Sort A to Z"** on the sub-menu. The list is sorted in order by last name.
4. If you selected the wrong column before sorting the list click the ⟲ **Undo** button to undo the sort.
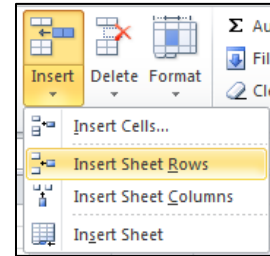
4. Advanced Sorting

### Exercise 6: Reordering the Columns: sorting by columns

1. Using the **Employee Records** worksheet, click in cell A1

2. On the Home Tab, click the bottom of the Insert button and click on **Insert Sheet Row**

3. Number the columns as follows

| 2	1	4	6	3	5
First Name	Last Name	Position	Salary	Department	Year Hired

4. Select the columns by clicking on "A" in the header row and dragging across all the columns

5. On the Home Tab, click on **Sort & Filter > Custom Sort**

6. Click on **Options** and check the **Sort left to right** option and click **OK**

7. From the **Sort by** drop down select **Row 1** and click **OK**

Now that the columns are in the order we want them, you can delete row 1 with the numbers in it.
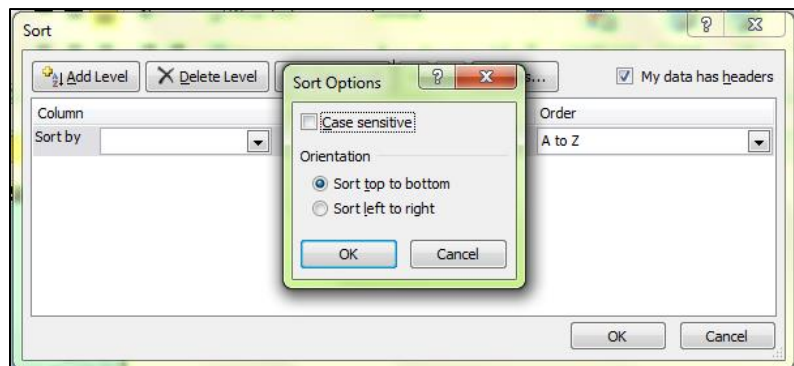
Exercise 7: Sorting a list using more than one field

1. Click any cell in the **Employee Records spreadsheet**

2. Click on the **Sort & Filter button** on the Home tab and then click **Custom Sort** on the sub-menu. The **Sort** dialog box is displayed.

3. Under **Column**, in the **Sort by** box, select the first column that you want to sort. Choose **Department**

4. Click on the **Add Level** button

5. In the new level – select **Position** and click **OK**
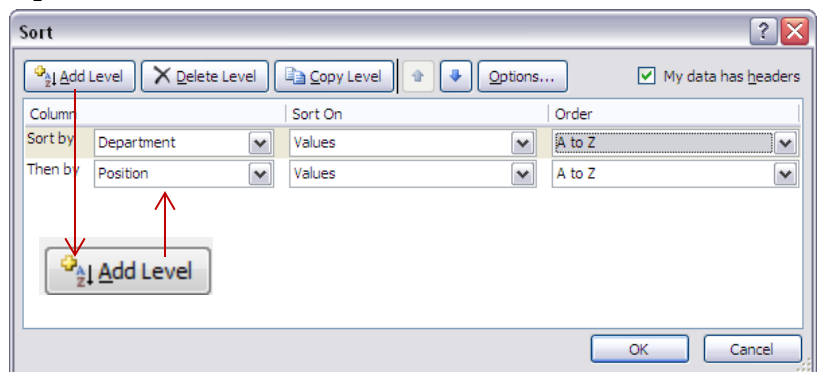
Custom sort options found on the Sort Dialog box – shown above

Under **Sort On**, select the type of sort. Do one of the following:

- To sort by text, number, or date and time, select **Values**.
- To sort by format, select **Cell Color**, **Font Color**, or **Cell Icon**.

Under **Order**, select how you want to sort. Do one of the following:

- For text values, select **A to Z** or **Z to A**.
- For number values, select **Smallest to Largest** or **Largest to Smallest**.
- For date or time values, select **Oldest to Newest** or **Newest to Oldest**.
- To sort based on a custom list, select **Custom List**.

To add another column to sort by, click **Add Level**, and then repeat steps three through five.


5. Filtering

Exercise 8: Filtering a List using AutoFilters

We learned how to sort the data, but what if we want to view data that meets certain criteria, such as Assistants in the Accounting Department. Using the feature allows you to filter your data so you view only the records you want.

	A	B	C	D	E	F
1	Last Name	First Name	Department	Position	Year Hired	Salary
2	Abraham	Thomas	Information Systems	Assistant		
3	Alexander	Ethan	Marketing	Secretary		

1. Click any cell in the **list** to make it active
2. Click on the **Sort & Filter button** on the Home tab and then click **Filter** on the sub-menu.
3. **Filter** arrows appear next to each column label in the list. Click an arrow next to a column to see a list of filtering criteria for that column.
4. Click the **Department** list arrow to see the criteria. Click the (Select all) check box to unselect all the departments and check one of the departments to view the chosen data subset.
5. Click the **Position** column list arrow and select **Secretary**
6. Click the **Salary** column list arrow **Largest to Smallest**
7. Try various combinations
8. To turn off the Filter. Click on the **Sort & Filter button** on the Home tab and then click **Filter** on the sub-menu.
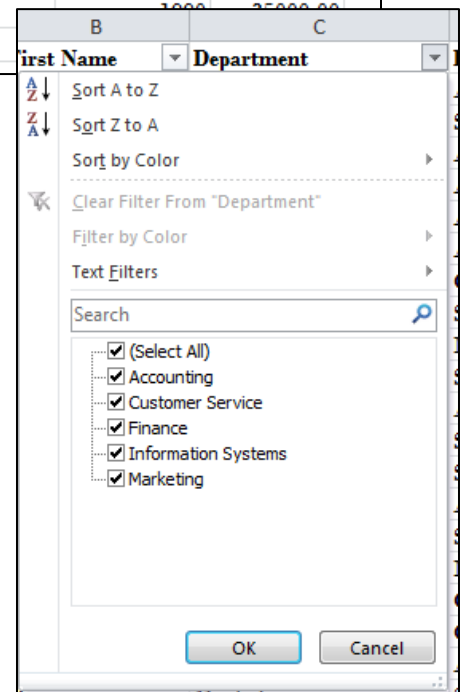
6. Finding Duplicate Records

Exercise 9: Using Conditional formatting

1. Using the **Source Data** sheet, click on the **column header** (E) for the Order ID to select the data
2. On the **Home Tab**, click on **Conditional Formatting** > Highlight Cells Rules > Duplicate values
3. From the dialog box, select the cell formatting you would like.
4. You can also choose to highlight Unique Values by changing the selection.
5. You can now do a Custom Sort and

   from the "Sort on" drop down select cell color of font color depending on what you chose in step 3.
6. The highlighted records can be deleted or moved.
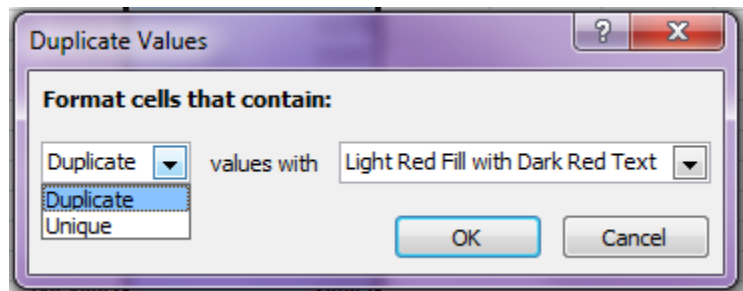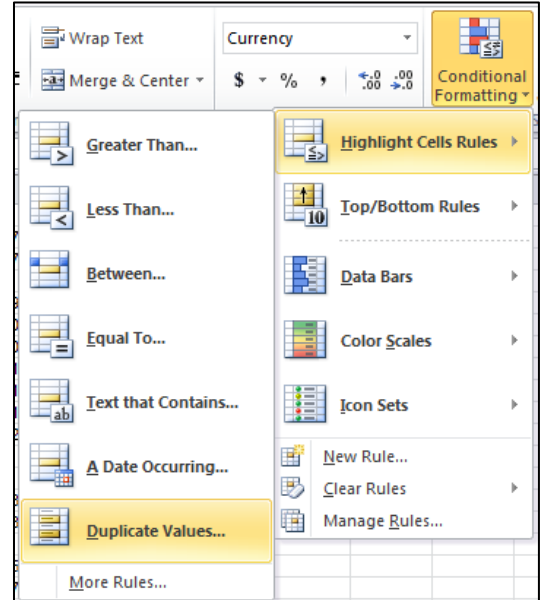
Exercise 10: Remove Duplicates

   It is best to have a copy of your data before you do this.

1. Right click on the Source Data Sheet and then click on **Move or Copy…**
2. Click the **Create a copy** check box and then **OK**
3. Click on the original **Source Data** sheet
4. Click on the Data Tab and then Remove Duplicates
5. In the dialog box, select the column or columns that contain duplicates
6. Click ok
7. The duplicates have been removed
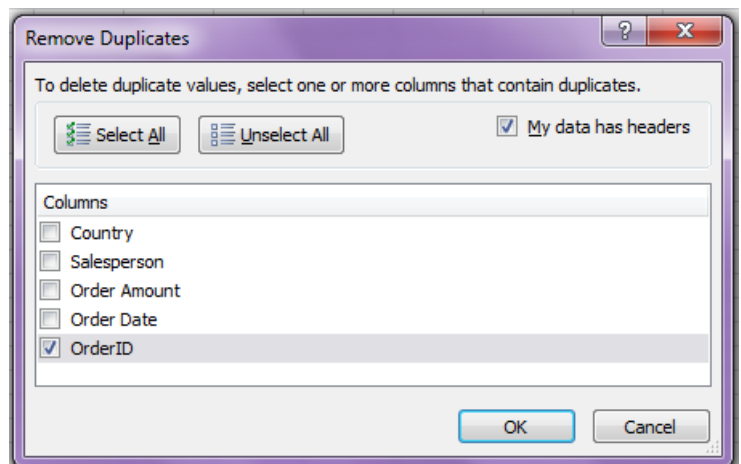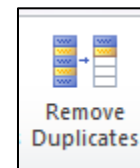
Exercise 11: The IF function

An **"If function"** used in Excel checks to see if the conditions you specify are True or False. If the result of the comparison is true, Excel returns one value and if it is false, it returns another.
The basic formula set up looks like this: =IF(logical_test, [value_if_true], [value_if_false])
In our example we will determine if the sale met the goal of $1500.00 or not.

1. On the **Sales Data** spreadsheet, click in column **D** and add a column
2. Click in cell **D2** and enter the formula **=IF(C2>1500, "Met Goal", "Keep Going")**
3. Click the Enter key and see if you get the correct answer
4. Use the Fill Handle to copy the formula to the rest of the column.

Learn more about the If Function:

http://office.microsoft.com/en-us/excel-help/the-if-function-what-it-is-and-how-to-use-it-RZ102425926.aspx?CTT=1

http://blogs.office.com/b/microsoft-excel/archive/2011/03/29/if-and-only-if.aspx