

How to make a pivot table on Excel (this is for Office 2007 on PC)

Ling 499a, Spring 2009

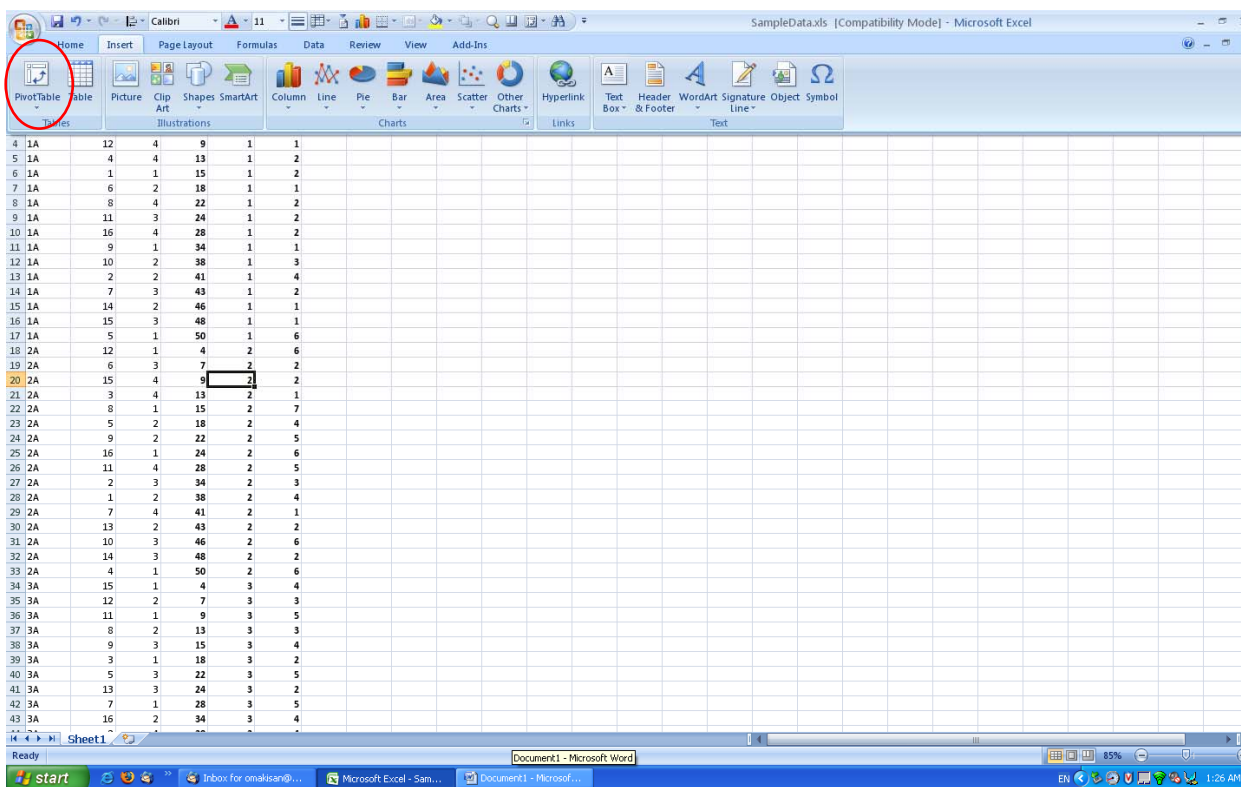
Goal:

For your lab project 1 data analyses, you need to have the average rating across subjects and items in order to see how your sentence manipulation affected the acceptability ratings. But you have lots of data from different sentence types and different subjects – when you have such a large amount of data, the **pivot table** function in Excel is very useful. Below is a brief guideline for how to use this function.

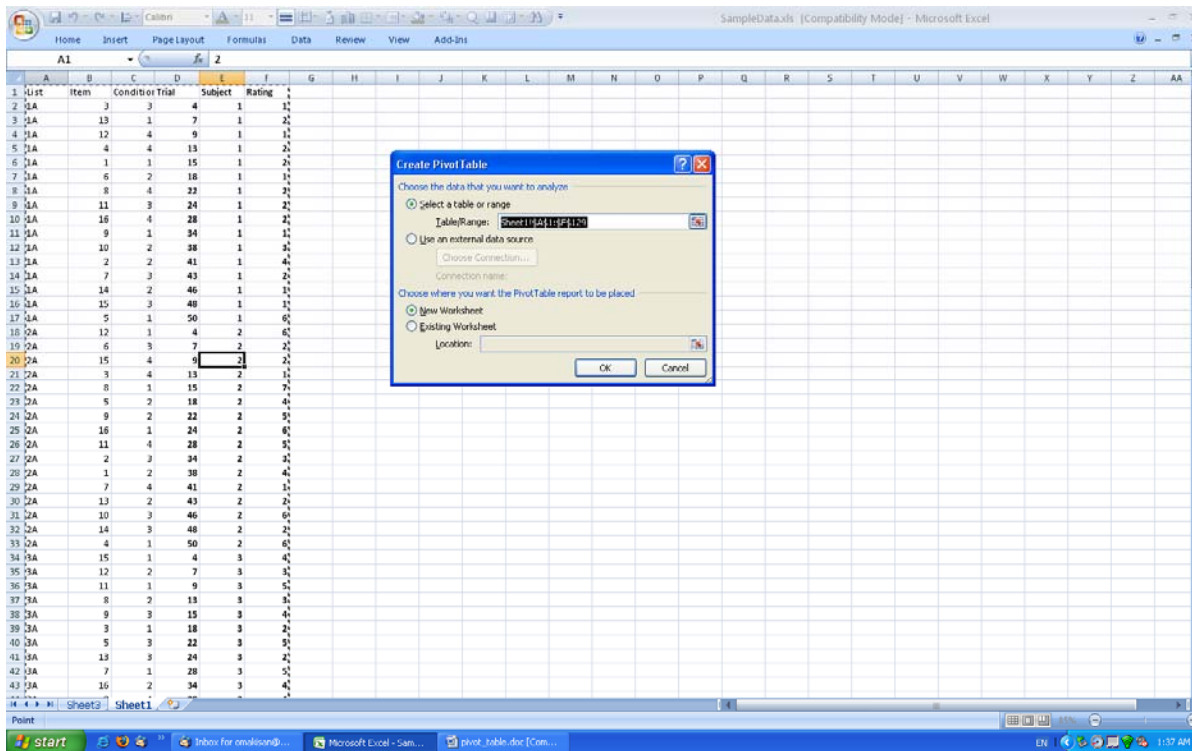
Note: This is written for Office 2007 on PC, but the same thing is doable on Office 2003 on PC or Office 2004/2008 for Mac. You might need to find the icon for pivot table differently – for that, just go to the help page to find where it is. Once you find it, the rest of the procedure is the same.

Step 1. Open your group results file. I will have added a **subject** column just to mark a subject number, but this is not so crucial for now. Now, just click and select one random cell in the data array.

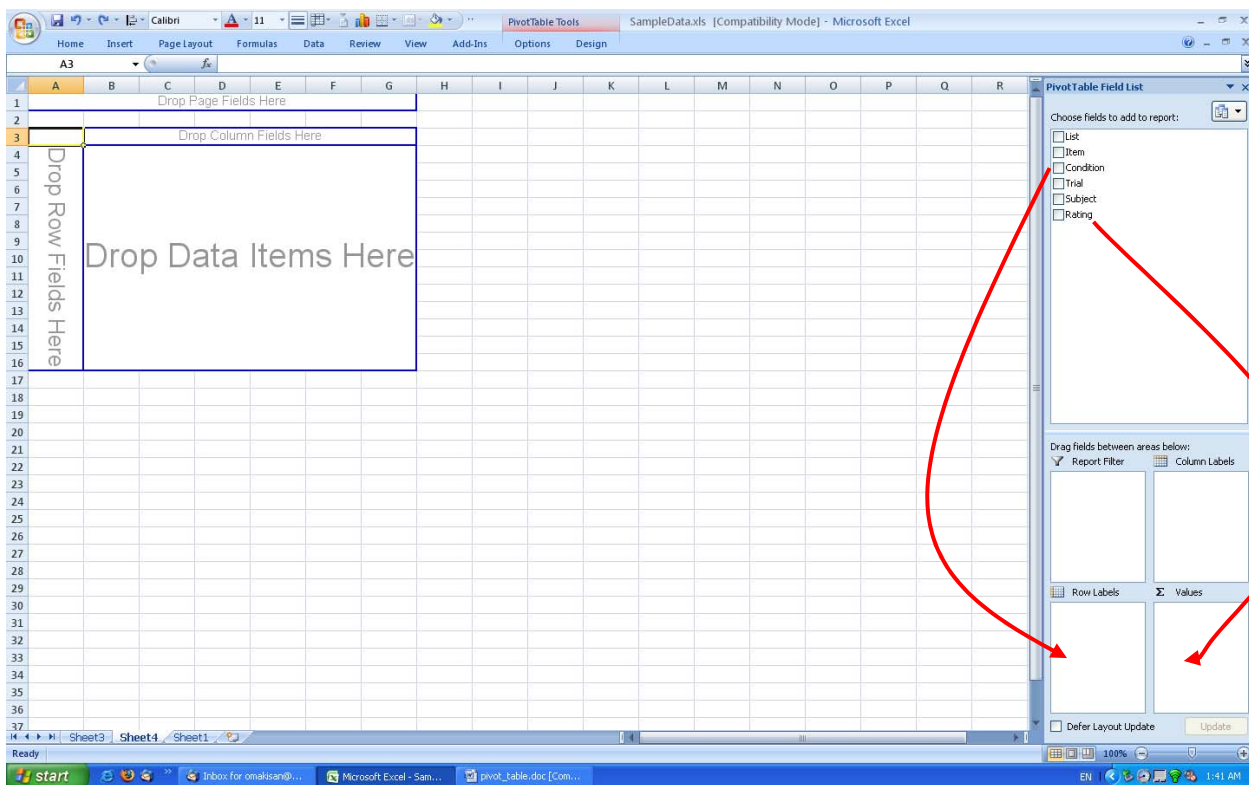
Step 2. Click on **Insert** tab (then the screen should look like below), and then on **pivot table**.



Step 3. You should see a new window for pivot table (see below). This is the window in which you are supposed to specify what range of data you want to be summarized in a pivot table – but you can see that the entire data array is already selected (this is why Step 1 is important). You can also choose to have your pivot table on the same worksheet or on a new worksheet. Make your choice, and click ok.

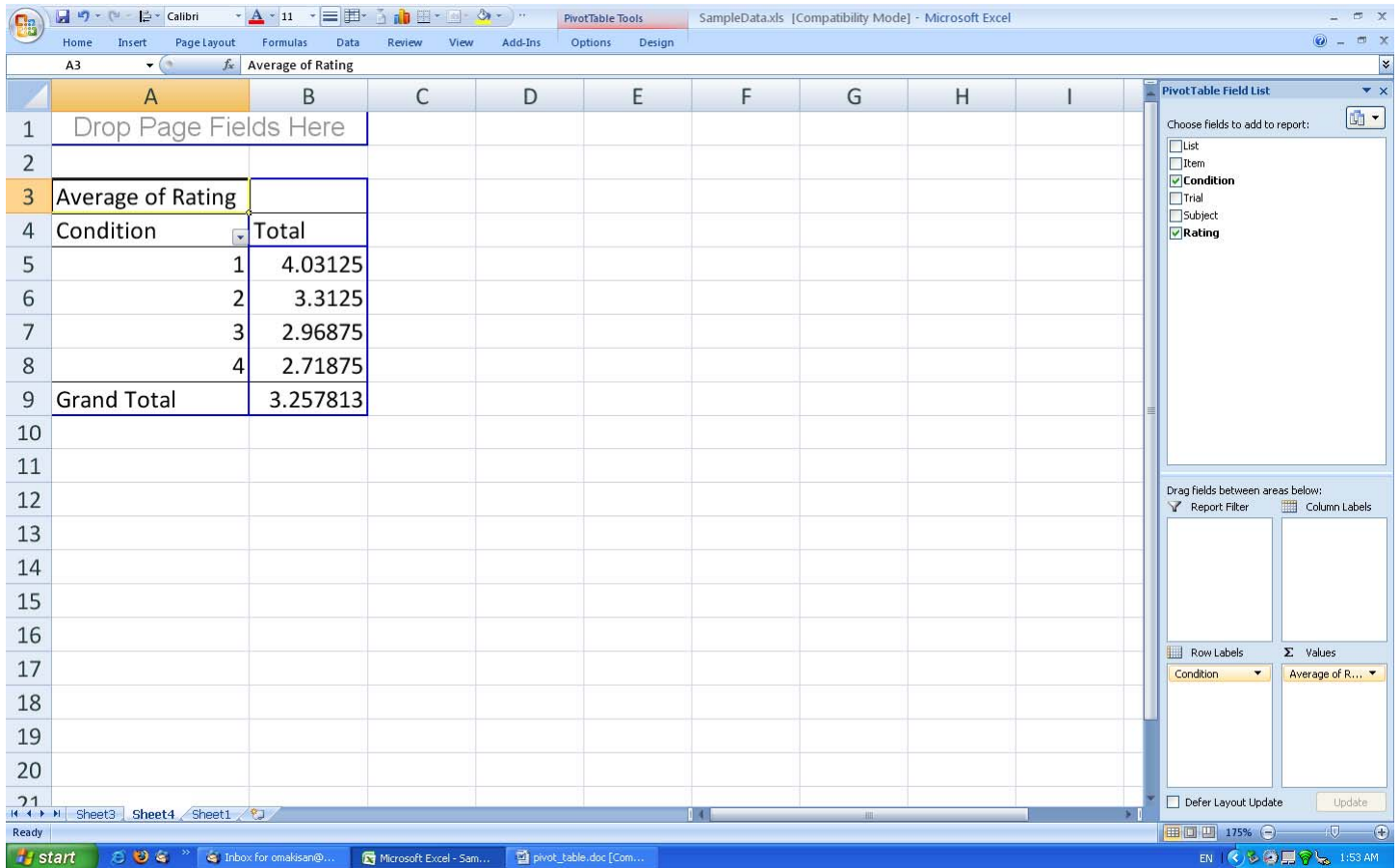


Step 4. You will now see a basic scheme for pivot table on the spread sheet, and on your right you will see a Pivot Table Field List. “Data items” is the place where you have your data, and you specify other variables using rows and columns.



For now, let's just see the group averages across all items and subjects for each condition. To do this, click (and hold) on "Condition" in the Field List on the right, and then drag and drop in either a) "Row Fields" directly on the pivot table, or b) "Row Labels" in the lower part of the Pivot Table Field List. Then, do the same drag-and-drop for "Rating" – now drop it in either "Drop data items here" on the pivot table, or "Values" in the Pivot Table Field List. On the figure above, I am showing you where to drop the "condition" and "rating" on the Pivot Table field List.

When you do this, you will see that the pivot table has four rows (conditions a, b, c, and d) and some data values. But the default way of summarizing data in pivot table is just summing the numbers, but that is not what we want – we want to see the averages. So, go back to the "Values" box where you dropped the "ratings", and click on the bar that says "Sum of Rating", and from the menu click on "Value Field Settings". You should then see a list of things that the pivot table can produce, so now just choose "Average" and click OK. This should now produce average ratings for each condition on the pivot table – and the screen should look like below at this stage.



That's all! There are lots of other cool things you can do with this function, and also, in reality we should also look at subject-by-subject averages and item-by-item averages too – but we will not worry about this for this lab project.

You can just take those four averages (but you can round it up a bit – for the data above, just saying 4.03 for Condition A is fine) for your 1-page report that is due next Thursday (Feb 26th).