Importing data into RStudio

Step 1 - Input and organize your data in Excel
Organize your data in an Excel worksheet, such that the first row (Row 1) contains the column names and each subsequent row contains all the necessary information for each data point in the experiment [i.e. classification levels and measurement(s)]. For example:

Block	Genotype	Location	Replication	Subsample	Yield	Quality	Disease	*and so on...*
1	A	1	1	1	23	143	2	
1	A	1	1	2	25	135	2	
1	A	1	2	1	24	152	3	
1	A	1	2	2	27	160	2	
1	B	1	1	1	32	123	1	
1	B	1	1	2	34	112	1	
1	B	1	2	1	32	134	1	
1	B	1	2	2	38	118	1	
1	C	1	1	1	16	87	4	
1	C	1	1	2	14	95	3	
1	C	1	2	1	15	82	3	
1	C	1	2	2	19	74	4	
and so on...								

Step 2 - Save your worksheet as a comma separated values (.csv) file type
Save your Excel spreadsheet as normal (default file type: Excel Workbook); this will be your master file that you can always return to in order to modify things, add new data, etc. Next, to create a version of your data to input into R, click "Save As…" A window will appear in which you can specify your desired filename as well as your desired *file type*. In Windows, for example, when you click "Save As…" you will see an option for "Choose other formats." Click that option, and then you will be presented with a pull-down menu of available file types. Select "**Comma Separated Values (.csv)**"

When you click to save the worksheet as a comma separated file (.csv), Excel will present you with a couple of warnings. One warns you that the .csv format cannot accommodate multiple worksheets. That's fine; just click OK/Continue to save the active worksheet. The second warning tells you that the .csv format cannot accommodate some of the fancy features of an .xls or .xlsx file. That's fine, just click OK/Continue. When you're done, you will see that a new file has been created (FILENAME.csv). If you were to open this file in a text editor, you would see that it looks like this:

```
Block,Genotype,Location,Replication,Subsample,Yield,Quality,Disease
1,A,1,1,1,23,143,2
1,A,1,1,2,25,135,2
1,A,1,2,1,24,152,3
1,A,1,2,2,27,160,2
1,B,1,1,1,32,123,1
1,B,1,1,2,34,112,1
1,B,1,2,1,32,134,1
1,B,1,2,2,38,118,1
And so on…
```

This may not look very friendly to us, but this is *exactly* the way R likes it.

Step 3 - Import your data into RStudio
Refer to Lab 1 for instructions on how to import data into RStudio, using the "Import data..." feature.

Remember, to learn R, you need to *play* with R. Happy R'ing!