

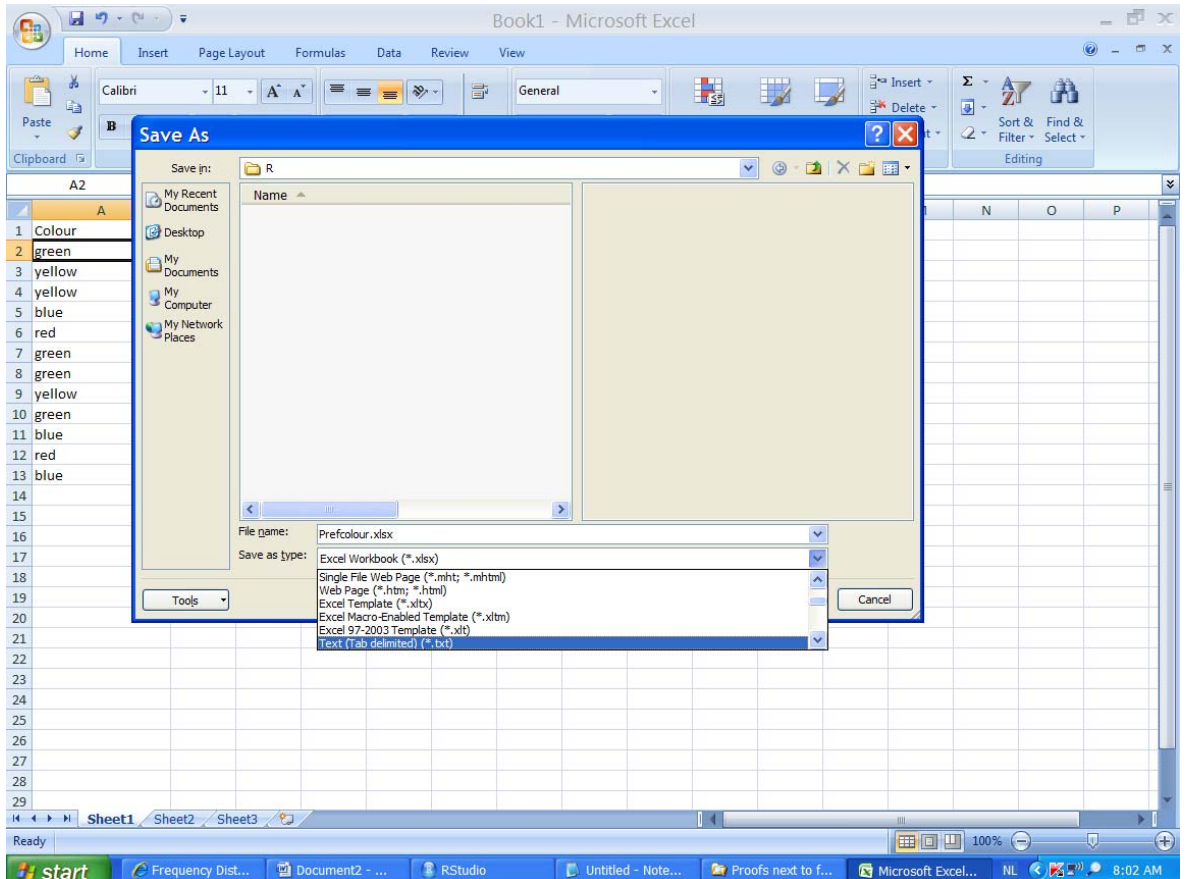
2e: How to make a bar graph in RStudio

When we have ordinal or nominal data, we have to use a bar graph instead of a histogram.

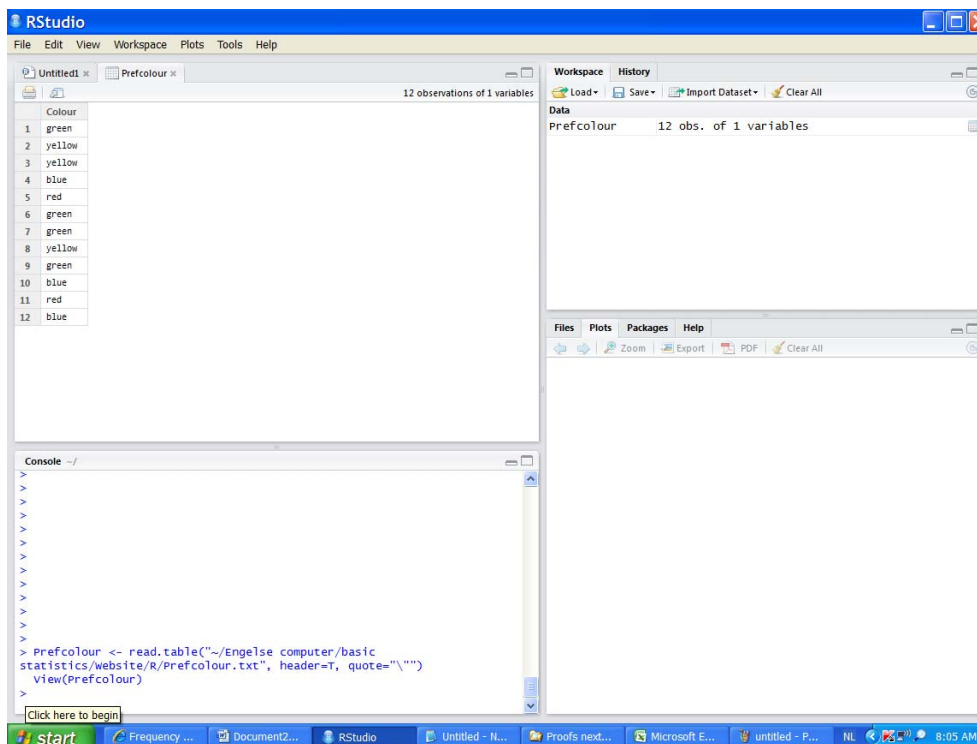
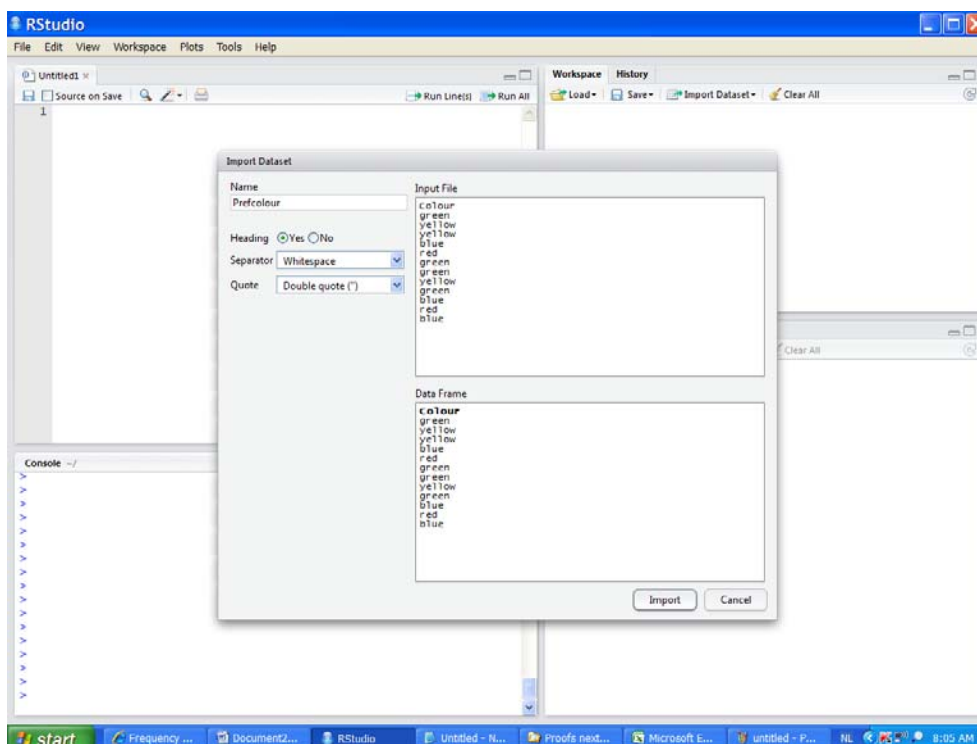
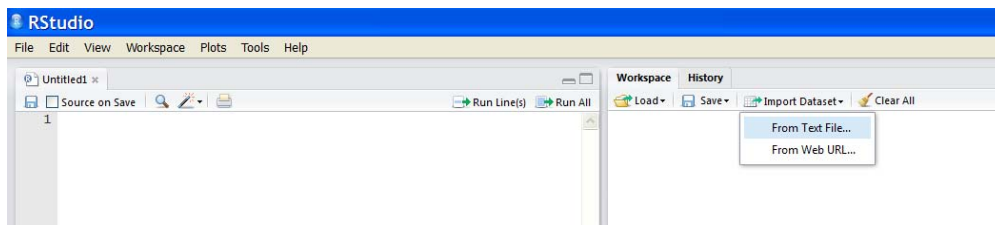
In the book, we used the example of colour preferences (p. 29). Here they are:

green, yellow, yellow, blue, red, green, green, yellow, green, blue, red, blue

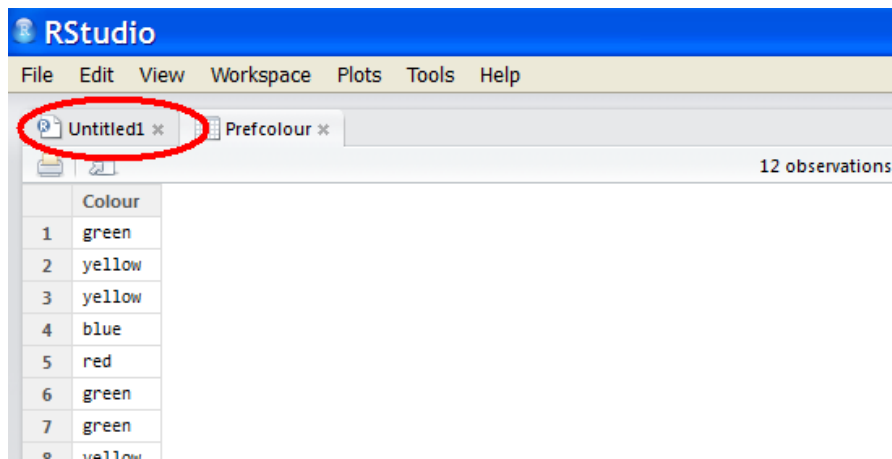
We enter them in RStudio via a tab delimited text file saved in Excel (see [here](#) for a guide).



Then we open
Prefcolour in
RStudio

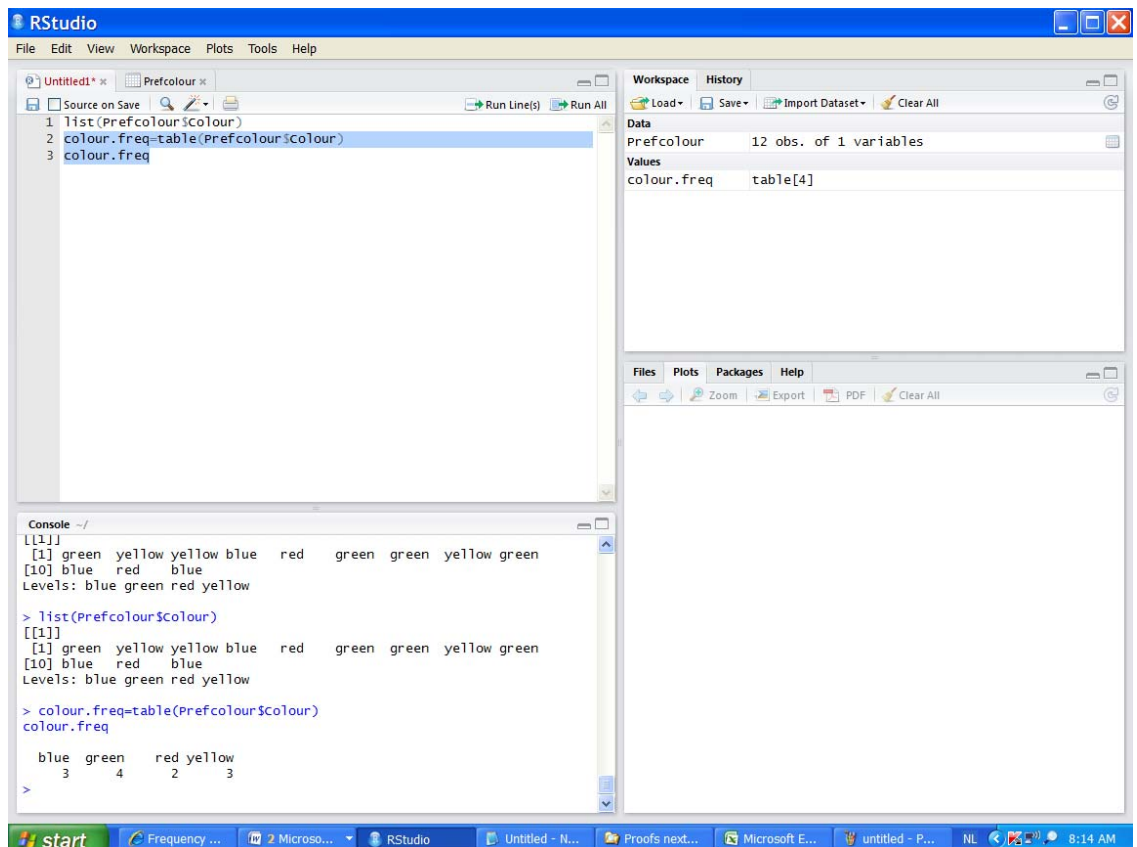


We go to the workspace
Untitled1:

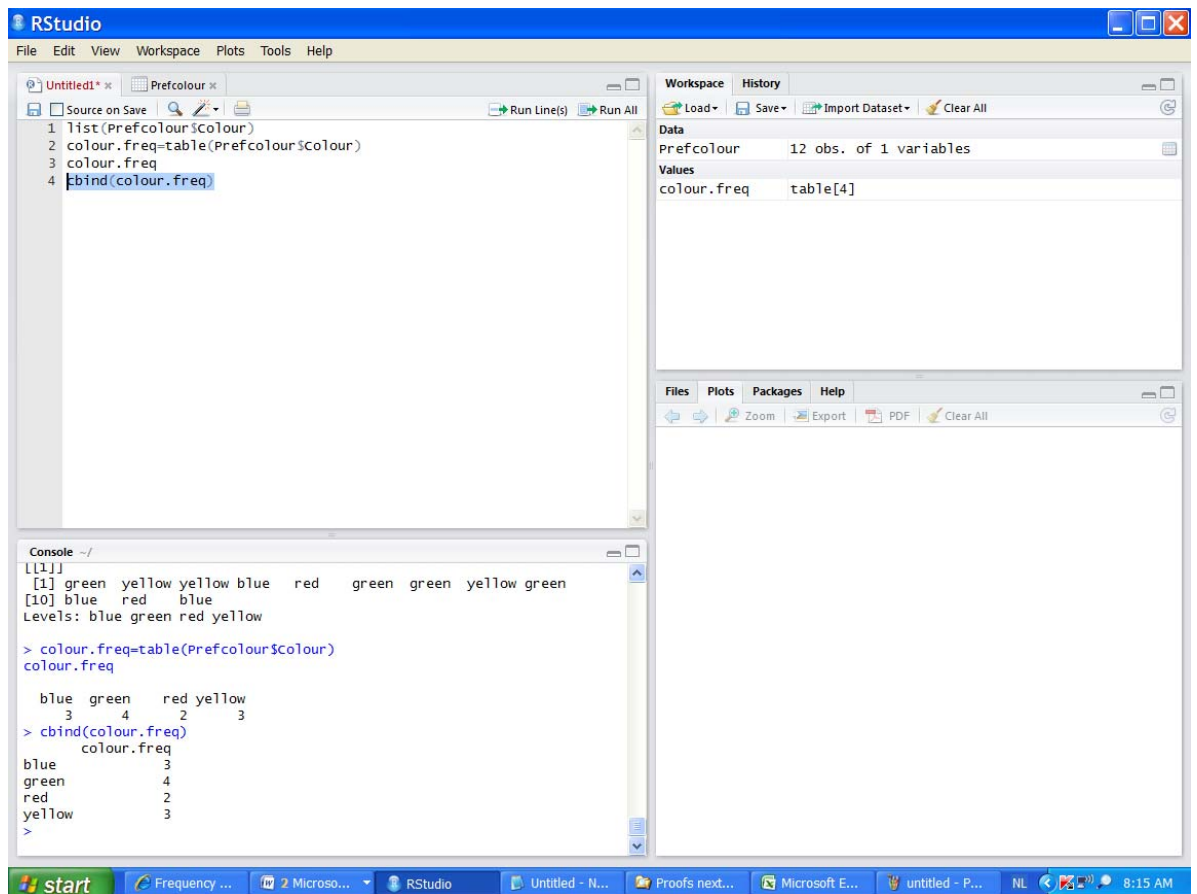


- To make sure we have entered everything correctly, run the command **list(Prefcolour\$Colour)**
- Do you get a list of all entries? If not, you are likely to have forgotten a capital (e.g., in Colour). Remember that R is case sensitive!
- To get a frequency distribution table of our data, we enter the commands:
colour.freq=table(Prefcolour\$Colour)
colour.freq

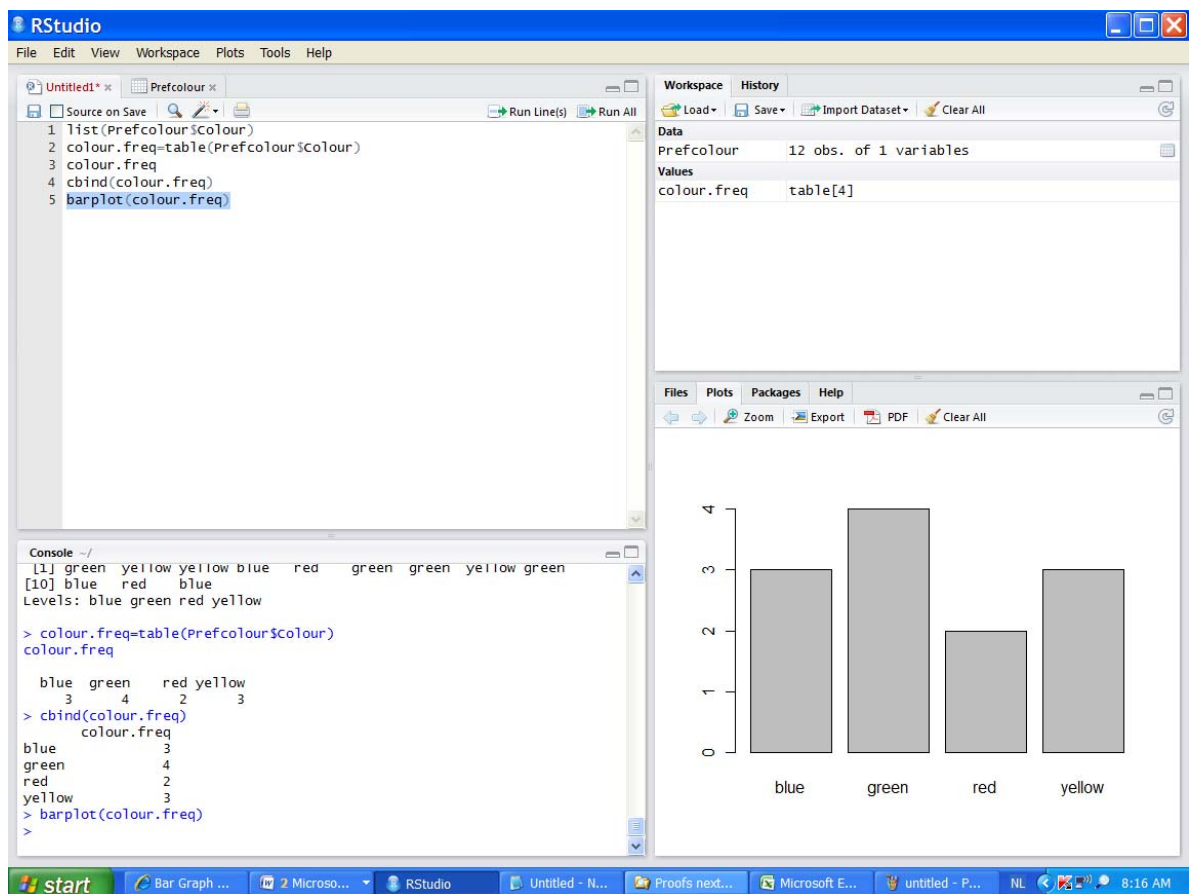
This gives you a row of the colours with their frequencies:



To have the output in columns use the command:
cbind(colour.freq)

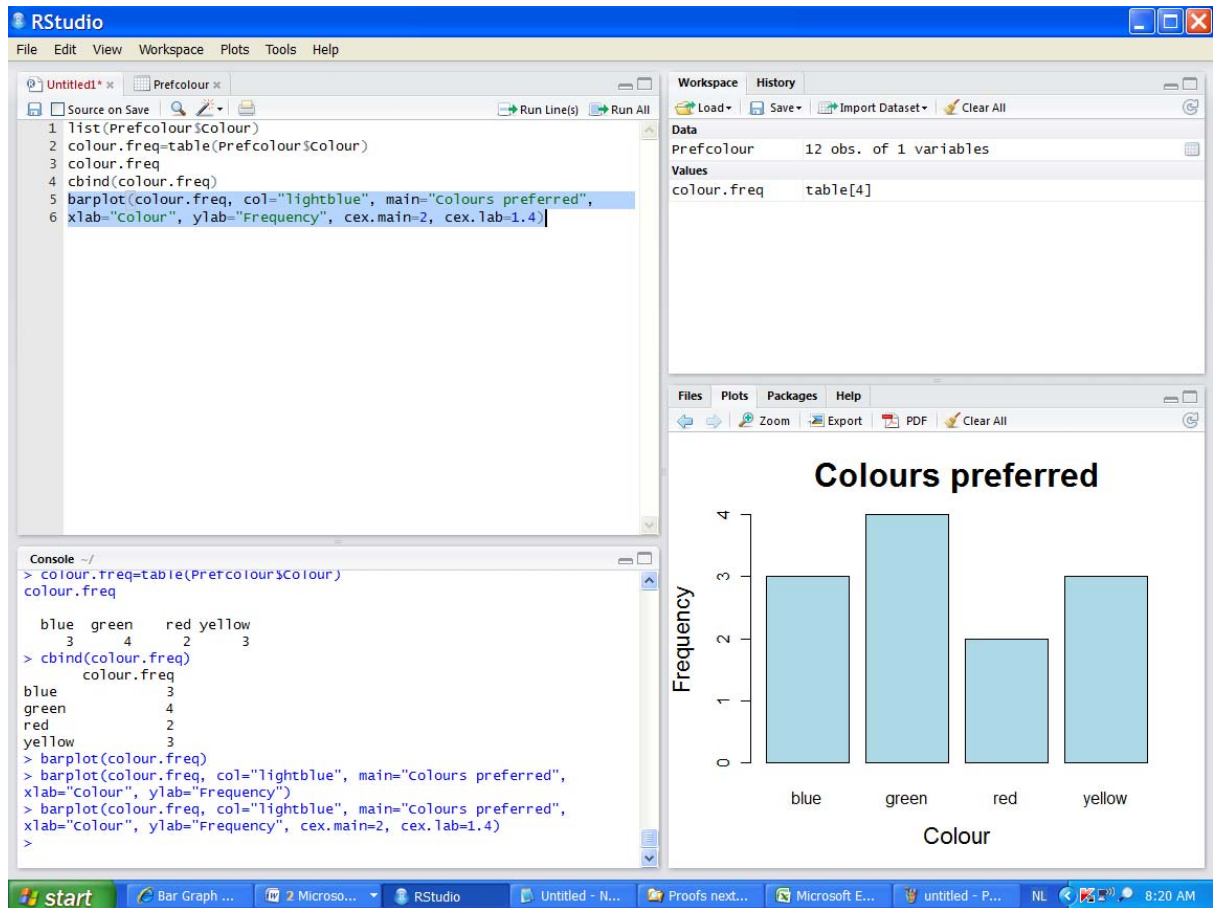


To make a bargraph, use the command
barplot(colour.freq)



- See [here](#) how you can embellish the graph. The following will help you a lot:
barplot(colour.freq, col="lightblue", main="Colours preferred", xlab="Colour", ylab="Frequency", cex.main=2, cex.lab=1.4)

This gives you the outcome:



Which you can easily export under different formats.