

Data Programming with R

Lab 4: graphics.

1. Run `demo(graphics)` at the R command prompt to see some of the things R can do.
2. Load in the **MASS** library in R, and load the data set called **survey**. Look at the help file to see what it contains.
3. Create a plot of span of the writing hand versus span of the non-writing hand.
4. Make a better plot of the same data using `type = "n"` and using different colours for each sex. (Hint: use the `points` function to add in the data for each sex.) Make the plot look 'nice' i.e. add axis labels etc.
5. Create a bar chart of the variable **Smoke**. Colour the bars, improve the bar labels (help file will be useful here), make the y-axis limits look 'nice', add a y-axis label and add a title.
6. Use `par(mfrow = c(2, 1))` to create two bar charts of smoking frequency by sex. Again, make the plots look 'nice'.
7. Create a boxplot of pulse by exercise status. Include a title, axis labels, colours, proper box names, make sure the y-axis is set correctly (using `las = 1`) and include gridlines.
8. Re-create the plot shown in slide 36 of the lecture notes, but using age instead of mother's weight. What happens to your plot if you use the variable `smoke` instead of `age` or `weight`?