

STAT40730

Data Programming with R (Online).

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?