

DS3: Week 3 - Homework 3

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1. Write a Pre-Analysis Plan for studying the SAT data. We'll use <https://aspredicted.org>
 - (a) Look at the questions asked AsPredicted.
 - (b) Discuss with your partner some scientific hypotheses (one to three) you would like to investigate concerning SAT
 - (c) Detail the statistical tests you would do to investigate these scientific hypothesis (don't do them yet).
 - (d) Write this up and post to AsPredicted. You can keep this private forever you want (read the documentation).
2. Write an analysis.Rmd that conducts the analysis and generates some figures. Output the figures the statistical results to a RData file.
3. Create a writeup.Rmd that summarizes the research (this can built off of the PAP).
 - (a) State the scientific hypotheses you are looking and why those interesting or important.
 - (b) Show the results from the statistical analyses and the figures from the saved files.
 - (c) Discuss the conclusions.
 - (d) Add an appendix with all the details you can think of for the data. Where did it come from? What was the situation like for students and teachers then?
4. Create a makefile with recipes for generating the files. Write a readme.md to note dependencies and how to build.