Assignment 1: Reproducibility, Workflow, Version Control

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OVERVIEW

This exercise accompanies the lessons in Environmental Data Analytics (ENV872L) on reproducibility, workflow, and version control.

Directions

- 1. Change "Student Name" on line 3 (above) with your name.
- 2. Use the lesson as a guide. It contains code that can be modified to complete the assignment.
- 3. Work through the steps, creating code and output that fulfill each instruction.
- 4. Be sure to **answer the questions** in this assignment document. Space for your answers is provided in this document and is indicated by the ">" character. If you need a second paragraph be sure to start the first line with ">". You should notice that the answer is highlighted in green by RStudio.
- 5. When you have completed the assignment, **Knit** the text and code into a single PDF file. You will need to have the correct software installed to do this (see Software Installation Guide) Press the **Knit** button in the RStudio scripting panel. This will save the PDF output in your Assignments folder.
- 6. After Knitting, please submit the completed exercise (PDF file) to the dropbox in Sakai. Please add your last name into the file name (e.g., "Salk A01 Reproducibility.pdf") prior to submission.

The completed exercise is due on Thursday, 17 January, 2018 before class begins.

1) Discussion Questions

Question

Why are reproducible practices becoming the norm in data analytics?

Answer: Reproducibility enables other people and future self to get the same results from the same dataset and analysis. Though reproducibility does not ensure correct results, it ensures transparency and make us understand exactly what was done.

Question

What are your previous experiences with data analytics, R, and Git? Include both formal and informal training.

Answer: My experiences with data analytics are mainly with Excel. I also took a econometrics course which used Stata. I have no experience with R and Git before.

Question

Are there any components of the course about which you feel confident?

Answer: No, but I'm excited to learn about R!

Question

Are there any components of the course about which you feel apprehensive?

Answer: No, all the topics seem interesting to me.

2) GitHub

Your Repository

Provide a link below to your course repository in GitHub. Make sure you have pulled all recent changes from the course repository (https://github.com/KateriSalk/Environmental_Data_Analytics) and that you have updated your course README file.

Answer: https://github.com/yz470/Environmental_Data_Analytics