Assignment 1: Introduction

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OVERVIEW

This exercise accompanies the introductory material in Environmental Data Analytics.

Directions

1. Change "Student Name" on line 3 (above) with your name.
2. Work through the steps, **creating code and output** that fulfill each instruction.
3. Be sure to **answer the questions** in this assignment document.
4. When you have completed the assignment, **Knit** the text and code into a single PDF file.
5. After Knitting, submit the completed exercise (PDF file) to the dropbox in Sakai. Add your last name into the file name (e.g., "Lima_A01_Introduction.Rmd") prior to submission.

The completed exercise is due on <Mon 1/17/22 at 7pm>.

1) Discussion Questions

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

   Answer: I took a Lab & Field Methods course in fulfilment of my environmental science undergraduate major where I learned how to use R to analyze large environmental datasets and produce reports using RMarkdown. I used the skills I learned in that course to complete an independent senior research project where I analyzed phosphorus sorption capacity of global soil orders. Because I had only learned the basics of R in the Lab & Field Methods course, I taught myself more advanced R coding to complete the soils project. My code worked well, although it was not very efficient. I continued a little bit with R in Martin Doyle's Hydrology class. The most "data wrangling" I have done was for GIS courses. I have never used Git before and this semester is my first introduction to it.

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

   Answer: I feel most confident with data visualization using ggplot and modelling (i.e., linear models, ANOVAs).

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

   Answer: I am apprehensive about spatial data analysis & visualization in R because I do not have any experience with it (I just learned this year that spatial data analysis is even possible in R). However, I am excited to learn about it!

2) GitHub

Provide a link below to your forked course repository in GitHub. Make sure you have pulled all recent changes from the course repository and that you have updated your course README file.

Answer: https://github.com/atf35/Environmental_Data_Analytics_2022.git