Assignment 1: Introduction

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OVERVIEW

This exercise accompanies the introductory material in Environmental Data Analytics.

Directions

1. Rename this file `<FirstLast>_A01_Introduction.Rmd` (replacing `<FirstLast>` with your first and last name).
2. Change "Student Name" on line 3 (above) with your name.
3. Work through the steps, **creating code and output** that fulfill each instruction.
4. Be sure to **answer the questions** in this assignment document.
5. When you have completed the assignment, **Knit** the text and code into a single PDF file.
6. After Knitting, submit the completed exercise (PDF file) to the appropriate assigment section on Sakai.

1) Finish setting up R Studio

Install TinyTex

Now, run this code cell the same way. This will install "tinytex" – a helper app that allows you to knit your markdown documents into professional quality PDFs.

Set your default knit directory

This setting will help deal with relative paths later on... - From the Tool menu, select `Global Options` - Select the RMarkdown section - In the "Evaluate chunks in directory", set the option to "Project" (If you don't see this option, try restarting RStudio.)

2) Discussion Questions

Enter answers to the questions just below the >Answer: prompt.

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

   Answer: I have no experience with Git. I have previous work experiences with data analytics and R relating to collecting, managing, and analyzing field monitoring data. I mainly worked with hydrologic data from continuous data loggers in gaging stations. Most of my data management strategies were self- taught so I am looking forward to gaining a more formal understanding of how to wrangle and store long-term monitoring data sets. I have used R for some basic data analysis of long-term monitoring data, specifically I used it to model the changes in water storage

after a stream restoration project (graphing the differences in stage pre- and post- restoration). I also took a brief "intro to r" training while working for the Inventory and Monitoring divison of the National Parks Service, but haven't had many opportunities to practice those skills since.

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

   Answer: I feel confident about my work ethic and excitement to take as much away from this class as possible! After working with large data sets in a professinal setting I recognize the importance of having good data management strategies. I want to be able to implement strong data management techniques from the onset of projects, as well as improve data management for projects I may join onto in future work. My undergraduate background is in Environmental Engineering and it was a very collaborative learning environment. I am excited that this course encourages us to learn from our peers. I believe I have a lot to learn from my classmates, as well as thoughts to contribute.

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

   Answer: I am slightly apprehensive about my coding skills and familiarity with GitHub. But these are the skills I am hoping to learn from the class, so I feel ok about this and look forward to learning more.

3) 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, committed those changes, and pushed them to your GitHub account.

Answer: https://github.com/erkaufman/EDE_Fall2023

4) Knitting

When you have completed this document, click the `knit` button.This should produce a PDF copy of your markdown document. Submit this PDF to Sakai.