Homework 0

STAT 625 Fall 2022

Helpful by September 8, 2020, 12:30pm

1   Reading

- Begin to read Chapter 1 of the text.

- Review the group norms adopted last year on Moodle. Consider what you'd like to keep or change for our class, for discussion Thursday.

- Review the **Review of STAT 516** document. Think about which questions are easy/hard familiar/unfamiliar to you, and which you would most like to discuss in class. These won't be graded, but knowing these concepts will be helpful for your learning in this class.

2   Actions

(Do not turn in homework this Thursday. Do complete the background survey and take these actions to prepare for next class.)

1. Following the guidelines here, install `R` and `RStudio` on your own computer.

2. We will be using `RMarkdown` to create `.pdf` files of our work to turn in on `Gradescope`. Watch the brief video about `RMarkdown` here. You may use the rest of this page as reference later, but you should be able to do what you need with other materials in the class.

3. Create a directory for this course on your local computer.

4. Download the file `Homework1_template.Rmd` from Moodle and place it in your directory for this course. Click on this file to open it. It should automatically open in `RStudio`, with working directory set to the location of this file.

5. Install the `alr4` R package using the command `install.packages('alr4')`. Since you only need to do this once, you can do it in the console in the lower left of your `RStudio` display. You may also type this line into your `RMarkdown` file, then comment it out after it has successfully executed.

6. If you do not yet have a version of LaTeX installed on your computer, install the '`tinytex`' `R` package using the following two `R` commands, executed successively:

   ```
   install.packages('tinytex')
   tinytex::install_tinytex()
   ```

   Again, you need only do this once, and can just do it in the console. *Hint: sometimes the special characters don't copy-paste well. You may need to type these lines yourself.*

7. Attempt to "knit" the file to `.pdf`. With the Homework 1 template opened in RStudio, click "knit" to create a `.pdf` output file. Next week, after you have filled in the answers to all the questions, you will need the resulting `.pdf` to turn in your homework. If you can get it to "knit" now, that's great. We will also have a little time for possible troubleshooting in class on Tuesday.

8. Sign up for our course gradescope page using entry code 57RJK6.

9. **Head Start:** If you are new to R or want a refresher, begin to review Chapter 0 pages 1-31 of the Computing Primer here and at least pages 1-14 of Chapter 1 of the supplemental text available online here: https://www.sagepub.com/sites/default/files/upm-binaries/38502_Chapter1.pdf. To do this, I recommend using `File -> New -> RMarkdown` to create a new file for this exercise. Type the code in the new `RMarkdown` file and execute it. Completing these will be part of next week's homework.

3 Online Questions

For this week's online questions, please complete the poll on your background and interests here if you have not already. It is also linked from Moodle.