Exercise 1
Part a: GitHub
Part b: quarto

Note: all homework submissions occur via github

Week 1 Exercise Part A:

1. Setup: get R 4.3.1, latest RStudio, git, quarto, etc.
2. If you haven't already, create an account at github.com/join; give GitHub username to Mark via https://forms.gle/pTQhsD8nWLpFr3dG7
3. Acquaint yourself with git / github (gitlab) [1]; make sure you can check in (`push`) / out (`pull`/`clone`) files from command line or app.
4. Create a new public github repository within your own account (give it a clever name), add a README.md and (using markdown [2]) add some content; include an image; include a web link, etc.
5. Add an Issue to the 'material' repo [3] with a link to your repo (you can delete the repo after I've closed the issue)

[1] https://confluence.atlassian.com/stash/basic-git-commands-278071958.html
[2] http://markdowntutorial.com/
[3] https://github.com/sta426hs2023/material

Quarto for executable documents / reproducibility

Week 1 Exercise Part B:

1. Test your R knowledge here: https://forms.gle/9U6PBzTiU2WU64Ki6 (only 9 questions)
2. Acquaint yourself with quarto for executable documents [1].
3. Using quarto and R, create an executable HTML document with R code that samples 100 values from a log-normal distribution (see the `rlnorm` function; you can use mu=5, sigma=0.5); using the `ggplot2` package, create a histogram of the sampled data on both the linear and log scales; create also a violin plot; within your quarto document, write 1-2 sentences to describe your steps and organize the document with subsection headings; report the mean and standard deviation of your sampled values *in line* in the text. Always show your code (i.e., do not hide when the HTML is built)
4. Add both the QMD and HTML files to the repo you made in Week 1 Exercise Part A.

[1] https://quarto.org/