

Homework 4

GSND 5345Q, Fundamentals of Data Science

Due Friday, February 13th, 2026

Now its time to practice what we have learned in class and learn even more! Note that from now on your homework should be written in R Markdown. Turn in your html file and Rmd files, and any other relevant files in a tarball. Then turn it in by uploading to canvas.

Data Structures (50 points)

1. (25 points) Learn more about the **scan**, **readLines**, **read_html**, **readr**, and **readxl** functions for getting data into R. Use these functions to read data from a files into a tibble using R. You can use your own data example or a dataset used in class. How are these different from the functions we learned in class? Report what you find and give some examples!
2. (25 points) Learn about the **S3**, **S4**, and **R6** classes in R. When do you think you would use these? Describe what you learned and give some examples!

R Markdown (50 points)

1. (25 points) Complete the markdown tutorial at <https://www.markdowntutorial.com/>. Confirm here that you completed it (on your honor!).
2. (25 points) R markdown is a powerful tool for literate programming. To gain more practice, as part recreate the `.Rmd` file for the example file in the homework folder: “Rmarkdown_example.html.”