## Assignment 4

#### STAT 280, Winter 2024

Suggested exercises from textbook: A first course in statistical programming with R, Third Edition. Braun, W. J., & Murdoch, D. J. (2021). Cambridge University Press.

**Due date**: Tuesday, February 27, 2024 at 20:00 pm EST

### Instructions

Students should upload their solutions on Moodle before due date. Late submissions will not be accepted.

- Solutions should be uploaded as a single PDF. Use of R Markdown is encouraged.
- Make sure to clearly state the problem number in your solutions. Always show the code used to solve
  an exercise (not the output only, unless explicitly stated) and comment on your code by using # where
  appropriate.
- Readability of code and clarity of presentation will be taken into account when marking.
- Each problem is worth 10 points.

### Reading

More on graphs will be found in chapter 3.

# Textbook problems

Section 3.1: pp. 66-67, Problems 1, 3

(Problem 1 "Consider the islands vector ... most appropriate for displaying these data?)

(**Problem 3**"Consider the pressure data frame. There are two columns ... decide whether the residuals follow a normal distribution or not.")

- Section 3.3: p. 70, Problems 4, 5

(**Problem 4** "Re-do the plots of Figure B.4, but this time apply ... example of a chi-squared random variable on one degree of freedom.")

(**Problem 5** "Refer to the previous question. Construct another set of six plots . . . may be limited in their usefulness?")

• Chapter 3: p. 90, Problem 2

(**Problem 2** "Consider the pressure data frame again ... Repeat once again using a  $1 \times 2$  layout.")