Fall 2022 Unit 1 Assignment

Assignment 1.6 – Data Types in R

Write a R script that provides answers to the following questions. If any questions need direct answers, give them in a comment.

- 1. For the following inputs, list all of the data type(s) that would be appropriate to store data in R. Code the example for each.
 - a. The word squirrel
 - b. The condition TRUE
 - c. The vector < TRUE, TRUE, FALSE, FALSE, TRUE >
 - d. The vector < 0, 0, 1, 0 >
 - e. The vector < 1.3, 3.3 >
 - f. The vector $\langle 2i, 3+3i \rangle$
 - g. The number 8
 - h. The number $3.\overline{6}$
- 2. For the following functions, what types of data do they accept as inputs and what data types do they return as outputs? Code a working example of each.
 - a. mean()
 - b. sd()
 - c. all()
 - d. cut()
 - e. sort()
- 3. Run the function is.character() on the coded example for each answer in 1 (give each example its own line). What does the output mean?
- 4. Use the function runif() to produce 1000 random numbers between 0 and 1. How many of these numbers have values greater than 0.5?

Turn in your R script.