

## 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.

- a. 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.
  - i. The word `dog`
  - ii. The condition `TRUE`
  - iii. The vector `< TRUE, TRUE, FALSE, FALSE, TRUE >`
  - iv. The vector `< 1, 0, 1, 0 >`
  - v. The vector `< 1.3, 3.3 >`
  - vi. The number `4`
  - vii. The number `5. $\bar{6}$`
- b. 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.
  - i. `mean()`
  - ii. `sum()`
  - iii. `all()`
  - iv. `cut()`
  - v. `sort()`
- c. Run the function `is.character()` on the coded example for each answer in **a** (give each example its own line). What does the output mean?
- d. 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.