

Assignment 1.7 – Vectors

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

- a. Create a vector that is a sequence of numbers between 10 and 150 with the total length of 300. By what amount is each element separated by?
- b. Create a vector that repeats the same sequence of numbers 1 through 5 fifteen times. How could you repeat these numbers element-wise instead?
- c. Create a vector **a** that is a sequence of numbers between 0 and 100 that contains numbers spaced by 0.1.
 - i. What class is the vector made in **a**?
 - ii. How long is the vector made in **a**?
 - iii. What is the mean value of the vector made in **a**?
 - iv. What value is at position 48 in the vector made in **a**?
 - v. What is the sum of the numbers in positions 611 through 762 of the vector made in **a**?
- d. You have a vector **pop1** which has the elements: `< 5, 7.3, 2.1, 11 >`. You'd like to add the value 1.3 to each element of **pop1** to create a new vector **pop2**. Write code to do this two different ways:
 - i. adding 1.3 to each element of **pop1**.
 - ii. performing a vectorized add of 1.3 to **pop1**.

Turn in your R script.