

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.

1. Create a vector that is a sequence of numbers between 3 and 50 with the total length of 600. By what amount is each element separated by?
2. Create a vector that repeats the same sequence of numbers 7 through 12 fifteen times. How could you repeat these numbers element-wise instead?
3. Create a vector `a` that is a sequence of numbers between 1 and 200 that contains numbers spaced by 0.1.
 - a. What class is the vector `a`?
 - b. How long is the vector `a`?
 - c. What is the mean value of the vector `a`?
 - d. What value is at position 48 in the vector `a`?
 - e. What is the sum of the numbers in positions 611 through 762 of the vector `a`?
4. 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:
 - a. adding 1.3 to each element of `pop1` separately.
 - b. performing a vectorized add of 1.3 to `pop1`.
5. The following line of code does not work. Correct the error so that a vector is produced.
`pop3 <- (3, 4, 7, 1, 3)`

Turn in your R script.