
L5: More R Lab

Complete the following exercises in R. Work in your small group to solve them. For each question, first write the code on the paper and once you have completed the whole sheet you can use R to evaluate yourself and see if the code worked as expected. Your end result should be a knitted RMarkdown file (Word preferred).

1. Given the following cities, create a vector in R and then identify the following:

Boston, Chicago, Houston, Myrtle Beach, San Antonio, Seattle, Boulder

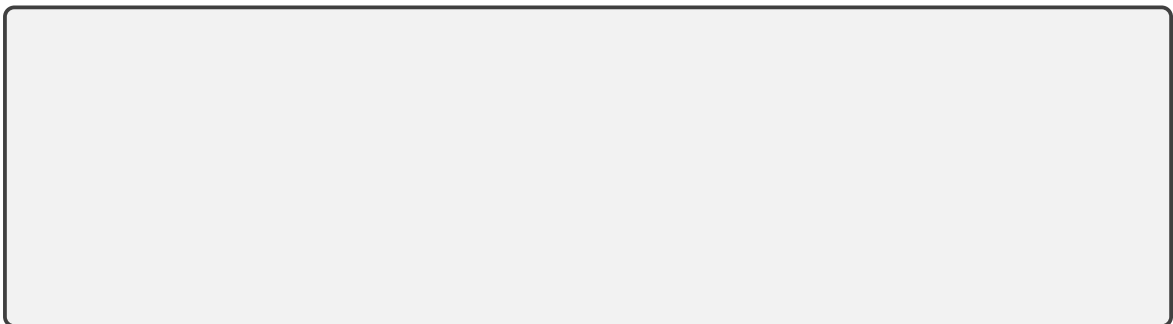
- (a) Cities that start with a "B"
- (b) Cities ending with the letters "ton"
- (c) Cities ending with consecutive vowels
- (d) Cities with the second to last letter being a vowel



2. Suppose a class received the following scores. What were the scores for the students who got the following scores:

72, 88, 91, 64, 55, 99, 83, 78, 67, 90

- (a) A score greater of equal to a 90
- (b) A score in either the 70's or 80's
- (c) How many scores were either less than a 60 or greater than a 95?
- (d) How many scores were an even number? (think back to math operators)



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3. You decide that you want to mimic the flipping of a coin using the functions available to us in R. How can we flip a coin 50 times (use “Heads” and “Tails” as the values)

4. The National Weather Service decided to record the daily temperature of Emmitsburg in Celsius:

18, 22, 19, 25, 27, 21, 23, 20, 24, 26

- (a) What is the code to find the minimum and maximum temperature?
- (b) What is the code to find the index of the hottest day?
- (c) What is the code to find how many days are in the vector?
- (d) What is the code to find how many days were above 24 degrees?

5. The ages of 10 students in class were 18, 21, 22, 17, 19, 22, 19, 22, 19 and 20

- (a) Write the code to determine if any ages are less than 18
- (b) Write the code to check if all of the students are adults (greater or equal to 18)
- (c) Check if any of the ages are equal to 21
- (d) List all of the ages with duplicates removed