Homework 1

Please copy and paste your code and answers into this document and submit on Canvas.

1. Install R and RStudio as well as the packages described in Section 1.4 of of R for Data Science. Paste the code you used to install those packages below.
2. Create a vector named temp with the average low temperatures in December for London, Shanghai, Sydney, Boston, Mexico City and Johannesburg which are 40, 38, 64, 28, 42 and 57° Fahrenheit.
3. Create a second vector with the city names called city.
4. Use the setNames() function to assign the city names to the corresponding temperatures using the two objects create above. (Hint: help(setNames)). You should overwrite your original temp vector with the named vector. Print the temp vector.
5. Recall that you can use the [] operator directly following a vector name to select specific values contained within that vector (e.g. temp[1] should return 40). Use this [] operator and the sum() function to calculate the sum of the temperatures for Sydney, Mexico City and Johannesburg.
6. Create a vector of all positive even numbers smaller than 75 using the seq() function. (Hint: help(seq))
7. Create a vector of numbers. Let the first value of the vector be 4, with a maximum value < 80, adding numbers in increments of 2/3. How many elements are in this vector?
8. Using your answer to the previous question, find another solution to create the same vector as the previous question.