Assignment #1

**1)** Create the vectors ‘x’, ‘y’ and ‘z’, with values shown below in order.

5 10 15 20 25 30

-1 NA 75 3 5 8

5

**2)** Multiply the first two vectors by the z vector, and store these in new objects. Print these new vectors.

x\*z [1] 25 50 75 100 125 150

y\*z [1] -5 NA 375 15 25 40

**3)** Replace the missing element of the y vector with the value 2.5, using the ifelse() function and print the vector.

**4)** Load the dataset ‘Assignment\_1.csv’ from the github source shown in class. You may import this however you please. If using the online source, the website is: "https://raw.githubusercontent.com/mattdemography/EDU\_7043/master/Data/Assignment\_1.csv"

Answer the following questions:

* Print the first 10 state abbreviations.
* Central Tendencies:
  + What is the mean murder rate in the U.S. given these data?
    - 8.727451
  + What is the median murder rate?
    - 6.8
  + What is the mean murder rate in New England?
    - 3.5
    - Hint: Look here: https://en.wikipedia.org/wiki/New\_England
  + Bonus: What is the mean Vcrime rate in the U.S.?
    - 618.32

**What to turn in**

* Publish your homework to GitHub under your user account, the appropriate format (check syllabus for instructions).
* Upload the code you used to GitHub.
* Provide me the links of these two files via e-mail no later than Thursday, September 6th at 6:00pm.