

## 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.

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](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?
  - What is the median murder rate?
  - What is the mean murder rate in New England?
    - Hint: Look here: [https://en.wikipedia.org/wiki/New\\_England](https://en.wikipedia.org/wiki/New_England)
  - Bonus: What is the mean Vcrime rate in the U.S.?

### 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 6<sup>th</sup> at 6:00pm.