For the week 5 assignment, please code the following functions. Please create the functions in a file called last\_first\_week5.py. So, for example, I would create a file 'henry\_william\_week5.py'.

- 1. Code a function called findSDArray(A). The function will take one argument, a numpy array. The function will find the standard deviations of the columns of the array and return them. The function needs to be able to ignore NaN values that may exist in the array.

The function will return: array([ 0.0896012, 0.4493518])

- 2. Code called normalizeArray(A), that will take in an array as the only argument. It will then find the standard deviation of each column of the array, just like the previous function. Then it will divide each column in A by its respective standard deviation. It will then return this modified array.
- 3. Code a function called negativesToZero(A). It will take one argument, an array, return an array that is the same as the input array, except any negative values have been changed to zeros.