Basic Matrix Exercises (Week 1):

**Please remember to comment your code and label your graphs!

1. Define the following matrix and do the following exercises. (Each exercise should be done independently of each other)

1	3	5
2	6	8
4	7	9

   a. Multiply each element by 3
   b. Add 2 to each element
   c. Isolate row 1
   d. Isolate column 3
   e. Divide 8 by 2 and subtract it by 5
   f. Replace the 7 with your answer from e

2. Define the following additional matrix and do the following exercises with the matrix from the first exercise

5	1	7
2	6	3
4	8	9

   a. Multiply the two matrices together (non element wise)
   b. Multiply the two matrices together (element wise)
   c. Add and subtract the matrices element-wise
   d. Add the 3 from both matrices together
   e. Multiply the entire first matrix by the second column in the second matrix. (PS: Order matters!)

For Loop Exercises (Week 1):

1. Create a for loop that accepts a 1xm matrix of random numbers of 0 and 1 and tells you how many elements are greater than 0.
   a. You can create such a matrix by the following command
      i. randi([0,1],n,m)
   b. To find the length of a list, use the following command
      i. length(x)

Script/ Function Exercises (Week 1):

1. Create a function that accepts two matrices and gives outputs for the operations done in the Live Script Exercises 1a, 1c, 1d, 2a-c, and 2e.