The purpose of this assignment is to familiarize you with the MATLAB programming environment. In addition it should provide a "gentle" introduction to computer programming for those of you who are new to computers. The information you will need to use to write the program for this assignment is described in MATLAB for Behavioral Scientists chapters 1 through 5. I recommend that beginning programmers work through these chapters before beginning the assignment. Note that help is always available from the MATLAB environment.

Use any commands you require to do the following.
1. Define one 1x1 matrix = 0, one 1x5 matrix (vector), one 3x5 matrix and one 5x3 matrix the latter three filled with numbers of your choice.
2. Add a scalar to the individual elements of the vector and one of the 3x5 matrices. Add one of the 3x5 matrices to the transpose of the other one.
3. Multiply the 3x5 matrix by the 5x3 matrix (proper order... and put result in another matrix.
4. Element-by-element multiply the 3x5 matrix by the transpose of the 5x3 matrix and put result in another matrix. Do the same to the 3x5 matrix but multiply by a scalar.
5. Use a FOR-END loop to increment the 1x1 matrix and also the 1x5 matrix.
6. Use an IF-END statement to set to zero any element of the incremented 1x5 matrix that exceeds the current value of the incremented 1x1 matrix.
7. Calculate the mean and standard deviation of the rows of the 5x5 matrix using MATLAB functions.

You may customize your program by personalizing it or making any other additions as long as the above 7 items are satisfied. It is also important to use comments (% followed by comment) to provide some initial information about the program, its name and purpose, programmer's name, date of creation, etc.) and also information about different sections of the program, what they do and how, etc. A well-documented program is much easier to understand, both for another user and for yourself after a period of time. Make sure that you liberally comment this program and all others you write for this course.