Assignment-1: Basic Matlab Operation (2 X 5 = 10 marks)

Install Matlab (2017a) standard edition 64 or 32 bit in your computer and perform these basic operations:

1. Take two 4-by-5 and 5-by-4 matrices randomly and perform matrix multiplication on the two matrices. The matrices should take new elements randomly on every execution. Display the diagonal elements of the resultant matrix.
2. Take a 25-by-30 matrix and find out the maximum, minimum, mean and standard deviation of all the elements.
3. Take a 4-by-6 matrix initialized randomly and normalize the values between 0 and 1. Set the values less than 0.2 to 0 and those greater than 0.8 to 1.
4. Plot sin and cosine curve in the same figure using different colors for values between 0 to 2π. Use legends for the curves
5. Here is an equation 5x+3y=7. Find out the values for x and y which satisfy this equation and plot those points (x, y) in the equation curve. (Minimum three points).