Assignment 4

CSCI 2150 Introduction to Scientific Computing

Total points **100**

Due Date: **Oct 28th 2015, 11.59 pm**

Write a Matlab Code to solve the below system of Equations using Gaussian Elimination.

As discussed in lab, first convert the system of equations to augmented matrix form. Then perform the rest of the operations on the augmented matrix to get the final values of x, y and z.

Please keep in mind you have to make the lower left triangle 0 and then the upper right triangle 0 in order to get the values. You have to convert the augmented matrix to an Identity matrix.

Things to keep in mind:

1. Do NOT use any in-built Matlab function that involve solving linear equations *other than those covered* in lab for doing this assignment.
2. Your output should be the final values of your B matrix that we saw in lab. So your output should look like:

Where val1, val2 and val3 will be the final values of your B matrix.

1. Before starting to write your code, solve the problem on paper so that you will get a better idea how to go about when coding it in Matlab.
2. You can refer the lecture notes regarding this assignment on Elc under ***materials -> lecture 4 and lecture 5***
3. ***Your program must be your own work. Referencing to others’ code is not allowed. Plagiarism and other forms of academic dishonesty will be handled within the guidelines of the Student Handbook and reported to the University.***