Lab 2 Assignment

Due on 05/22 at noon on Blackboard.

Write a function MYLU to perform the LU factorization for an arbitrary $n \times n$ matrix (under the assumption that elimination can be performed without row exchanges). Run the function on the input

$$
T = \begin{pmatrix}
-3 & -9 & -5 & -7 & -1 \\
-8 & 8 & -6 & 0 & 5 \\
2 & 2 & -4 & 2 & -4 \\
1 & 7 & 0 & 4 & -6 \\
4 & 2 & 7 & 5 & 5
\end{pmatrix}.
$$

Test to see if this factorization is correct.

HW GUIDELINES

- You should turn in both your completed code (the m-file), and the command window containing successful execution of the code (using the tests given in the problem). Your grade will be based on correctness, completeness, organization, and neatness.
- Remember to suppress output and only show output where appropriate.
- Remember that m-files should be commented so that a reader would know what the program/function does.