MAE 3210 - Spring 2019 - Homework 3

Homework 3 is due **online** through Canvas in PDF format by 11:59PM on Monday February 4.

You are required to submit code for all functions and/or subroutines built to solve these problems, which is designed to be easy to read and understand, in your chosen programming language, **and which you have written yourself**. The text from your code should both be copied into a single PDF file submitted on canvas. **Your submitted PDF must also include responses to any assigned questions, which for problems requiring programming should be based on output from your code**. For example, if you are asked to find a numerical answer to a problem, the number itself should be included in your submission.

NOTE: For this homework you are welcome to solve problems 1, 2, 4, and/or 5 by hand, without using programming or submitting code. However, you are **required** to solve problems 3 and 6 with programming, and a copy of your code must be submitted.

Friday January 25 and Monday January 28 class:

1. Textbook problem 9.7.
2. Textbook problem 9.8.
3. Textbook problem 9.18.

Wednesday January 30 and Friday February 1 class:

4. Textbook problem 10.2.
5. Textbook problem 10.10 (a),(b).
6. Textbook problem 10.19. **NOTE:** For this problem you are required to submit documented code that can perform LU decomposition and matrix inversion, but you are not required to produce specific output from the program. You are certainly encouraged to test that it works, however, and you are also encouraged to include results of that testing, although it will not be graded.