1. Upload the notebook of week three.

2. Write a code for the gauss elimination method and apply it to solve a non-singular matrix. Verify the correctness of the result comparing with linalg.solve

3. Write the backward and forward substitution codes to obtain y and then x, for the solutions of Ax=b, where A=LU, such that Ux=y, and Ly=LUx=b. Use linalg.cholesky to generate the L and U matrices, and verify against the solutions in problem 2.