5627: HW2

1. Cholesky decompostion

    1.1. Write and test your own Cholesky decompostion code. Make sure you explain the output format of your code.

    1.2. Make sure your code tests for +Def and Symmetry.

    1.3. Make a log-log plot of the timing for your code with an aproppriate reference line.

2. Symmetric +Def Solver

    2.1. Combine your Cholesky decomposition and Lower Triangular solve into a function "CholeskySymSolver[A,b]" that returns the solution of $Ax=b$ for a symmetric +Def matrix A.

    2.2. Test this code appropriately.

    2.3. Make a log-log plot of the timing for your code with an aproppriate reference line and the timing for a built-in solver on the same graph.