Mech 417 Homework #3 Jan 31 due Feb 7

1. Use analytic integration (unit coordinates are recommended) to verify the upper triangles of the L2 matrices on page 8 of 11. Assume a constant Jacobian (a linear geometry map) and constant properties, $f^e$, $\alpha^e$, and $Q^e$.

Mech 517 Homework #3 Jan 31 due Feb 9
Groups allowed

1. Write Matlab functions store_colemn_loop.m and store_full_square_loop.m using the corresponding Fortran code on page 7 of 11 of the Galerkin FEA extension notes.

2. Use Maple or Matlab symbolic to verify the matrices for the L3 element given on page 8 of 11 by following the example on pages 9 through 11.