GS 510 **Homework (due Nov 13)** A. Hulpke

18) a) Consider again the matrix multiplication routine from problem 17. The task in this problem is to get this program run as fast as possible, by using suitable compiler optimization. Begin by reading the C User's Guide for stokes which can be found at
`http://www.math.colostate.edu/manuals/sunpro/c-compiler/user_guide/index.html`
(Pay particular attention to those sections that address parallel programming issues.)
Next, experiment with various compiler switches in an attempt to get a matrix multiply code to produce the best performance rating you can achieve. Record the results of your experiment in such a way that you can report your results to the class.
b) Is the "optimal" optimization in a) always the best for 300x300, 513x513 and 1000x1000 matrices? Investigate.

Note: The library has the following books on course reserve which might be useful for projects:

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Topics in advanced scientific computation / Richard E. Crandall
RESERVE -- QA9.58 .C73 1996 -- AVAILABLE

UNIX in a nutshell : a desktop quick reference for System V
RESERVE -- QA76.76.O63 R568 1999 -- AVAILABLE

When you can't find your UNIX system administrator / Linda Mui
RESERVE -- QA76.76.O63 M845 1995 -- AVAILABLE
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