Readings

1. Read Chapters 2 (Sections 2.3 and 2.4.1-2.4.5) of Grama’s book.

2. Scan the sample Parallel programs on hydra and get familiar with writing small parallel programs on SGI ORIGIN.

Team Programming (each team consisting of 2-3 people): Due Thursday - Sept 6

Write a shared memory program on hydra to multiply two \( n \)-by-\( n \) floating point matrices. Fill up the matrices with some constant values so that it would be easier for you to verify the resulting product for correctness.

Prepare a speedup plot with varying \( n \) and vary number of processes in the available range. Use pure sequential time without any overhead for \( T^*_1 \). Put both algorithms data lines on the same plot.

Submit email copies of your source code, your timings, tabulated nicely, and any writeups. Submit one per team identifying yourself and team members clearly.

For bonus points: ensure that the difference in load between any two processors is no more than one row.

Exercises: Due Tuesday - Sept 11

Q2.12 and Q2.14.