

Homework 1 - Due 9:10 AM, Thursday, Sept. 3

- To submit your homework:
 - Submit a PDF file
 - Use the "handin" program on the CADE machines
 - Use the following command:
`"handin cs4961 hw1 <prob1file>"`
- Problem 1:
 - What are your goals after this year and how do you anticipate this class is going to help you with that? Some possible answers, but please feel free to add to them. Also, please write at least one sentence of explanation.
 - A job in the computing industry
 - A job in some other industry where computing is applied to real-world problems
 - As preparation for graduate studies
 - Intellectual curiosity about what is happening in the computing field
 - Other

Homework 1

- Problem 2:

- Provide pseudocode (as in the book and class notes) for a correct and efficient parallel implementation in C of the parallel sums code, based on the tree-based concept in slides 26 and 27 of Lecture 2. Assume that you have an array of 128 elements and you are using 8 processors.
- Hints:
 - Use an iterative algorithm similar to count3s, but use the tree structure to accumulate the final result.
 - Use the book to show you how to add threads to what we derived for count3s.

- Problem 3:

- Now show how the same algorithm can be modified to find the maximum element of an array. (problem 2 in text). Is this also a reduction computation? If so, why?