

Due via email by class time on Monday 22 November 1999
(This homework counts as 2 homework grades)

Write a C or C++ program using MPI to implement a parallel version of bucket sort, as described in Section 4.2.1 of *Parallel Programming*, by Barry Wilkinson and Michael Allen

Using the “walker” and “obr” clusters, run this program on two, four, eight, and sixteen of these machines. Instrument the program, and compare the running time of the program as it runs on different numbers of machines, for different sizes of data. Is this a good program to parallelize in this way? Explain your answer.

To turn in this homework, email the program to Professor Walker (walker@mcs.kent.edu) before class time on the due date. Then, in class, turn in a printout of the program, along with your answer to the question posed in the previous paragraph.