

CS4402: Parallel Computing

2013 Assignment – Parallel Internal Sort

This assignment requires you to develop a MPI program for the parallel Odd-Even sort.

The work will be done over two practical classes in order and will be submitted by 5th of December 2013. The MPI program will have to contain the following MPI functions:

1. MPI_Compare_exchange() → for the P2P compare and exchange operation
2. MPI_Sort() → for the parallel odd-even sort operation.
3. MPI_Is_sorted() → test if the parallel array sort is done.
4. Some extra features ???

The work will be done independently during the practical classes however you will receive our assistance.

The elements to submit will be as follows:

1. the MPI program name with your name and student id e.g. johndoe_123456.c.
2. the Makefile file to compile that.
3. a readme.doc file in which you have to give some experimental data about the speedup of the program.