2013-12-10

Introduction to distributed and parallel processing

Laboratory 5

Write using MPI the following programs:

1. Implement Matrix-Vector Multiplication algorithm presented during lecture. You can assume that the matrix is a square matrix. Implement the following function:

   ```
   void parallelMatrixVectorMult(float *submatrix, float *subvector, int sizeOfMatrix).
   ```

   We assume that the matrix and the vector is equally distributed among processes. You have to preserve this in the main program before you call function `parallelMatrixVectorMult`. Remember that the size of strip you can compute as `sizeOfMatrix/p`, where `p` is the number of processes. You can add a few other parameters to the function if you justify it.
   Test the function for small and large matrix (`sizeOfMatrix` in thousands).