Introduction to Parallel Computation

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Exercise 2: Data Parallel Programming

Write a "paper and pencil" MPL program for the "All Pairs Shortest Paths" problem on the basis of the accompanying C program[1].

The program shall work with *any* number of graph nodes (hint: embed the distance matrix into the next larger matrix whose dimensions are multiples of the corresponding processor array dimensions).

The result of this exercise is a small paper that contains the source of your program, and a description of the algorithmic ideas.

Have fun!

> *Real programmers don't comment their code. It was hard to write, it should be hard to understand.*
>
> *Real programmers disdain structured programming. Structured programming is for compulsive neurotics who were prematurely toilet-trained. They wear neckties and carefully line up pencils on otherwise clear desks.*

[1] http://www.risc.uni-linz.ac.at:81/courses/ws96/intropar/path/path.c