Comments of the organizers on the record
of problem D, contest of 2012, MPI+OpenMP

date: January 25, 2013

time: 2339 msec, speed-up: 8

This is the first solution to the problem. The solution space is searched in parallel, working each process in a subtree from the first level of the solutions tree. The best result is obtained with 32 MPI processes, and the speed-up achieved is 8, so the solution could be improved. Sequential improvements could involve nodes elimination with a more elaborated bound function in the backtracking, resorting of pieces, guided search..., but some of these approaches can require additional communications. Other possibility is to combine MPI and OpenMP parallelism.