

Decision Making with Constraint Programming: Exercises 5

To Do - 1.

Objective: Minimize the total distance of the queens to the main diagonal and search the optimal solution to the 50-queens problem, using different search strategies.

Comments: For this final exercise we can observe that the combination of dwd-rand + restart + LNS has a better performance than others. This happens because with LNS we explore subproblems which are typically much smaller than the total problem so that the tree search in this is much quicker.

N = 50	Fails	obj
Def	12.155.098	796
dWd-rand	16.056.905	780
dWd-rand + restart	11.511.823	672
dWd-rand + restart + lns	2.510.600	650