

Modelling Constraint Satisfaction Problems

Consider the CSPLIB benchmarks, available at the www.csplib.org web site.

Use only arithmetic (possibly conditional) constraints of the Comet language to model and solve the following CSPLib problems:

CSPLib 06: Golomb Rulers

For different values of m , assess the minimum rulers that is possible. Assess the efficiency of the execution of your solution.

CSPLib 07: All-Interval Series

Test your solution for different values of n , to assess the efficiency of execution. Compare your program with another that uses the system available constraint “all_different”.

CSPLib 24: Langford Number Problem.

Generalize it to different values of n and k , and assess the efficiency of execution.