

Problem Solving and Search in AI Tutorial 8 (on January 22nd)

Lucía Gómez Álvarez

January 22, 2021

Exercise 8.1

Consider the constraint graph G of Exercise 1.1 (the crossword puzzle). Compute the tree-decomposition of G using the elimination ordering of the min-fill heuristic. Develop a program that performs the computation for any crossword puzzle.

Answer the following questions:

1. What is the width of the particular tree-decomposition?
2. How big is the search space of G ?
3. How big is the search space for the tree-decomposition?