

CSE 473 Introduction to Artificial Intelligence

Autumn 2001

Problem Set 1

Due: Oct 10, 1:30pm

For the Water Jug Problem as specified in Chapter 2:

1. (14 points) Write a program that searches for a solution using the production rules in Fig. 2.3 as moves in the state space. You can drop any rules that you need to.
2. (2 points) Implement a search control strategy and explain in a sentence or two why you chose it.
3. (2 points) Does your program find the shortest path? Explain in a sentence or with a diagram.
4. (2 points) Is your program guaranteed to terminate? Explain in a sentence.

Please type your answers to the question in a readable manner (your TA has many assignments to grade and has only limited time to spend on yours!).