Exercises 4 and 5
State Space: Water Jug Problem

This is a problem of representing a problem as a state space search.
You are given two jugs:

- 4 gallon jug
- 3 gallon jug

Neither has markers.
There is a pump that can be used to fill the jugs with water.
How can you get exactly 2 gallons of water intor the 4 gallon jug.

Exercise 4

- Solve the problem by hand and give the solution noting the actions taken to reach the solution
- Answer the following with words:
  - What is a representation of the state of the system
  - What is the initial state
  - What is the final state
  - What are the production rules acting on the states

Exercise 5

Set up the following as templates and rules in Clips.

- What is a representation of the state of the system
- What is the initial state
- What is the final state
- What are the production rules acting on the states

If you are particularly daring, make a complete Clips program to solve this problem.