CS347 FS2003 Quiz 1

This is a closed-book quiz. The only item not supplied during the quiz that you are allowed (and required) to use, is a pen or pencil (that’s right, no calculators!). Mark all paper you use with your name, the date, and the string “cs347fs2003”. If you are caught cheating, you will receive a zero grade for this quiz. The max number of points per question is indicated in square brackets after each question. The sum of the max points is 100. You have exactly 30 minutes to complete this quiz. Good luck!

1. What is the difference between systems that think like humans and systems that act like humans? [15]

2. What is a rational agent? [15]

The next three questions are about a soda machine which accepts only quarters, charges two quarters per soda bottle, and offers the choice between two kinds of soda.

3. Give the PEAS description for a soda machine. [20]

4. Classify your soda machine task environment according to the following properties: [3]
   - Fully observable/partially observable
   - Deterministic/stochastic
   - Episodic/sequential

5. Explain each of your three choices in the previous question. [15]

6. Give the pseudo-code for a model-based reflex agent for the soda machine. [32]