
CS 42, 2012

Assignment 0

Due Monday night, 3 September 2012, 11:59 PM

Form-alities

As part of taking CS 42 or any other CS course, it is required that each student follow the policies of the CS department for responsible use of the machines/network/computing facilities and in following the department's academic honesty policy.

Both of these are no more than CS-specific elaborations of the HMC Honor Code. (If you're not an HMC student, they are extensions of your institution's honor code.) Either way, it's required that you complete them by the time that homework 0 is due.

These two policies:

Account Request Form (the facilities policy)

Academic Honesty Policy

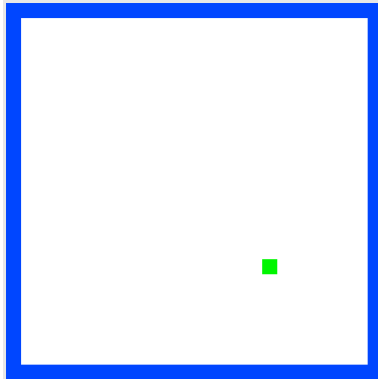
are both found under the "Profile" tab in the CS submission site. (If you don't see the "Profile" tab, click "Home" and it will appear.)

By Monday night, please read over and complete those forms, acknowledging that you agree to those policies.

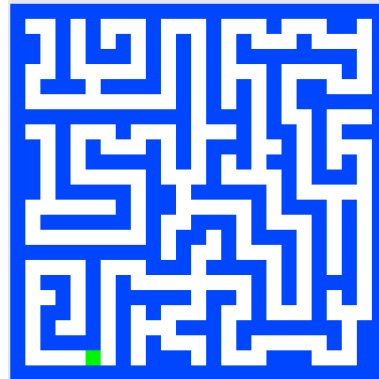
Problems

Construct rule sets that will always cause Picobot to completely cover these two rooms. Describe your strategies in English prose.

hw0, Problem #1



hw0, Problem #2



Each rule set must work *regardless* of Picobot's starting location.

Extra Credit Problems

(may be hard)

Problem #3

Is there a single rule set that will allow Picobot to cover *any* connected board (including, but not limited to, the examples given)? If so, exhibit such a rule set. If not, prove there is none.

Problem #4

Is there a 2-state rule set for the empty-room problem? Either show one, or prove there is none.