Planning with CCALC

Assignment CCALC-1. Enhance the planning example in the shooting domain (Section 2 of *Using the Causal Calculator with the C Input Language*) as follows. (a) For shooting to succeed, the gun needs to be aimed properly. (b) In addition, assume that there are several targets (*turkey1,turkey2,...*). (c) In addition, assume that the guns are initially locked in a safe; they should be back there after shooting. (d) In addition, assume that a gun may hold two bullets.

Assignment CCALC-2. (a) A robot with two grippers wants to move three balls from Room 1 to Room 2. Use CCALC to find a plan for doing that. (b) Assume, in addition, that the balls need to be painted in the process: originally they are all white, and at the end they should have the colors of the American flag. Red paint and blue paint are available in Room 3.

Assignment CCALC-3. (a) You have a few quarters and a few dollar bills. A dollar changer is available. Use CCALC to find a plan for putting a given number of quarters into a parking meter. (b) Assume, in addition, that the meter has a handle that needs to be turned every time after putting a quarter in the slot.