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| **Satisfiability of Test Cases** | **Number of Steps to Solve** | **Notes** |
| **case1.asp** | 5 | Working! |
| **case2.asp** | 6 | Working! |
| **case3.asp** | 6 | Working! |
| **case4.asp** | 7 | Working! |
| **case5.asp** | 7 | Working! |
| **case6.asp** | 6 | Working! |
| **case7.asp** | 6 | Working! |
| **case8.asp** | 7 | Working! |
| **case9.asp** | 7 | Working! |
| **case10.asp** | N/A | Should be unsatisfiable because shelves are in the way and can’t be moved. |
| **case11.asp** | 11 | Working! |
| **case12.asp** | 12 | Working! (but had to move the shelves in closer to make the time more manageable) |
| **case13.asp** | 7 | Working! |
| **case14.asp** | N/A | Not returning satisfiable |
| **case15.asp** | 10 | Working! |
| **case16.asp** | 7 | Working! |
| **case17.asp** | 11 | Working! |
| **case18.asp** | 6 | Working! |
| **case19.asp** | N/A | Not returning satisfiable, may be too intense of a case |
| **case20.asp** | 9 | Working! |
| **case21\_4x4.asp** | 12 | Working! |
| **case22\_4x4.asp** | 11 | Working!  occurs(object(robot,1),pickup,1)  occurs(object(robot,2),pickup,1)  occurs(object(robot,3),pickup,1)  occurs(object(robot,4),pickup,1)  occurs(object(robot,1),move(1,0),2)  occurs(object(robot,2),move(1,0),2)  occurs(object(robot,3),move(-1,0),2)  occurs(object(robot,4),move(-1,0),2)  occurs(object(robot,1),deliver(1,1,500),3)  occurs(object(robot,2),deliver(2,2,500),3)  occurs(object(robot,3),deliver(3,3,500),3)  occurs(object(robot,4),deliver(4,4,500),3)  occurs(object(robot,1),move(-1,0),4)  occurs(object(robot,2),move(-1,0),4)  occurs(object(robot,3),move(1,0),4)  occurs(object(robot,4),move(1,0),4)  occurs(object(robot,1),putdown,5)  occurs(object(robot,2),putdown,5)  occurs(object(robot,3),putdown,5)  occurs(object(robot,4),putdown,5)  occurs(object(robot,1),move(1,0),6)  occurs(object(robot,2),move(0,1),6)  occurs(object(robot,3),move(0,-1),6)  occurs(object(robot,4),move(-1,0),6)  occurs(object(robot,1),move(0,-1),7)  occurs(object(robot,2),move(1,0),7)  occurs(object(robot,3),move(-1,0),7)  occurs(object(robot,4),move(0,1),7)  occurs(object(robot,1),pickup,8)  occurs(object(robot,2),pickup,8)  occurs(object(robot,3),pickup,8)  occurs(object(robot,4),pickup,8)  occurs(object(robot,1),move(0,1),9)  occurs(object(robot,2),move(0,-1),9)  occurs(object(robot,3),move(0,1),9)  occurs(object(robot,4),move(0,-1),9)  occurs(object(robot,1),deliver(1,1,500),10)  occurs(object(robot,2),deliver(2,2,500),10)  occurs(object(robot,3),deliver(3,3,500),10)  occurs(object(robot,4),deliver(4,4,500),10) |
| **case23\_4x4.asp** | N/A | Not returning satisfiable, may be too intense of a case |
| **simple.asp** |  |  |
| **inst1.asp** | 13 | Working! |
| **inst2.asp** | 12 | Working! |
| **inst3.asp** | 8 | Working! |
| **inst4.asp** |  | Working! (with a few changes to shorted the time) |
| **inst5.asp** | 7 | Working! |