akshaypeshave@akshaypeshavePC /cygdrive/c/emacs
$ cd c:

akshaypeshave@akshaypeshavePC /cygdrive/c
$ cd cygwin/

akshaypeshave@akshaypeshavePC /cygdrive/c/cygwin
$ cd bin/

akshaypeshave@akshaypeshavePC /cygdrive/c/cygwin/bin
$ blackbox -o domain.pddl -f p0.pddl -solver chaff
blackbox version 42
command line: blackbox -o domain.pddl -f p0.pddl -solver chaff

Begin solver specification
    -maxint   0   -maxsec 0.000000   chaff
End solver specification
Loading domain file: domain.pddl
Loading fact file: p0.pddl
Problem name: 0
Facts loaded.
time: 1, 22 facts and 7 exclusive pairs.
time: 2, 25 facts and 22 exclusive pairs.
Goals reachable at 2 steps but mutually exclusive.
time: 3, 25 facts and 18 exclusive pairs.
Goals first reachable in 3 steps.
177 nodes created.

###
goals at time 4:
  arm-empty looks_block-a_red

** Turning off completeness check **
Converting graph to wff
number of action variables = 29
number of fluent variables = 24
total number variables = 53
number clauses = 158
Result is Sat
Iteration was 0
Performing plan justification:
   0 actions were pruned in 0.00 seconds

Begin plan
1 (pick-up red-spraycan)

2 (spray-paint block-a red-spraycan red)
3 (put-down red-spraycan)
End plan
----

3 total actions in plan
0 entries in hash table,
2 total set-creation steps (entries + hits + plan length - 1)
0 actions tried

###
Total elapsed time: 0.00 seconds
Time in milliseconds: 3

###

akshaypeshave@akshaypeshavePC /cygdrive/c/cygwin/bin
$ blackbox -o domain.pddl -f p1.pddl -solver chaff
blackbox version 42
command line: blackbox -o domain.pddl -f p1.pddl -solver chaff

Begin solver specification
    -maxint   0   -maxsec 0.000000 chaff
End solver specification
Loading domain file: domain.pddl
Loading fact file: p1.pddl
Problem name: 1
Facts loaded.
time: 1, 31 facts and 12 exclusive pairs.
time: 2, 39 facts and 83 exclusive pairs.
time: 3, 40 facts and 80 exclusive pairs.
Goals reachable at 3 steps but mutually exclusive.
time: 4, 40 facts and 65 exclusive pairs.
Goals first reachable in 4 steps.
374 nodes created.

###
goals at time 5:
  arm-empty looks_block-a_red

** Turning off completeness check **
Converting graph to wff
number of action variables = 81
number of fluent variables = 57
total number variables = 138
number clauses = 813
Result is Sat

Iteration was 0
Performing plan justification:
    0 actions were pruned in 0.00 seconds

Begin plan
1 (pick-up paint-brush)
2 (load-paint-brush paint-brush red red-paint-can)
3 (paint-with-brush block-a paint-brush red)
4 (put-down paint-brush)
End plan
----

4 total actions in plan
0 entries in hash table,
3 total set-creation steps (entries + hits + plan length - 1)
0 actions tried

###
Total elapsed time: 0.01 seconds
Time in milliseconds: 5

###

akshaypeshave@akshaypeshavePC /cygdrive/c/cygwin/bin
$ blackbox -o domain.pddl -f p2.pddl -solver chaff
blackbox version 42
command line: blackbox -o domain.pddl -f p2.pddl -solver chaff

Begin solver specification
    -maxint   0   -maxsec 0.000000 chaff
End solver specification
Loading domain file: domain.pddl
Loading fact file: p2.pddl
Problem name: 2
Facts loaded.
time: 1, 55 facts and 32 exclusive pairs.
time: 2, 78 facts and 464 exclusive pairs.
time: 3, 79 facts and 397 exclusive pairs.
time: 4, 90 facts and 555 exclusive pairs.
time: 5, 92 facts and 472 exclusive pairs.
Goals reachable at 5 steps but mutually exclusive.
time: 6, 92 facts and 361 exclusive pairs.
Goals reachable at 6 steps but mutually exclusive.
time: 7, 92 facts and 318 exclusive pairs.
Goals first reachable in 7 steps.
1586 nodes created.

###

goals at time 8:
  looks_block-a_red looks_block-b_blue clean_paint-brush is-color_paint-brush_no   ne

----
** Turning off completeness check **
Converting graph to wff
number of action variables = 473
number of fluent variables = 249
total number variables = 722
number clauses = 16014
Instance unsatisfiable
Result is Unsat
Iteration was 0

----
time: 8, 92 facts and 292 exclusive pairs.
265 new nodes added.

##
goals at time 9:
  looks_block-a_red looks_block-b_blue clean_paint-brush is-color_paint-brush_no   ne

----
Converting graph to wff
number of action variables = 607
number of fluent variables = 306
total number variables = 913
number clauses = 21797
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 8 steps
time: 9, 92 facts and 292 exclusive pairs.
265 new nodes added.

##
goals at time 10:
  looks_block-a_red looks_block-b_blue clean_paint-brush is-color_paint-brush_no   ne

----
Converting graph to wff
number of action variables = 741
number of fluent variables = 363
total number variables = 1104

number clauses = 27272
Result is Sat
Iteration was 0
Performing plan justification:
   0 actions were pruned in 0.02 seconds

Begin plan
1 (unstack block-b block-a)
2 (put-down block-b)
3 (pick-up blue-sprayer)
4 (spray-paint block-b blue-sprayer blue)
5 (put-down blue-sprayer)
6 (pick-up paint-brush)
7 (load-paint-brush paint-brush red red-paint-can)
8 (paint-with-brush block-a paint-brush red)
9 (clean-paint-brush paint-brush red water-bucket)
End plan
----

9 total actions in plan
0 entries in hash table,
8 total set-creation steps (entries + hits + plan length - 1)
0 actions tried

###
Total elapsed time: 0.26 seconds
Time in milliseconds: 257

###

akshaypeshave@akshaypeshavePC /cygdrive/c/cygwin/bin
$ blackbox -o domain.pddl -f p3.pddl -solver chaff
blackbox version 42
command line: blackbox -o domain.pddl -f p3.pddl -solver chaff

Begin solver specification
   -maxint   0   -maxsec 0.000000 chaff
End solver specification
Loading domain file: domain.pddl
Loading fact file: p3.pddl
Problem name: 3
Facts loaded.
time: 1, 100 facts and 88 exclusive pairs.
time: 2, 223 facts and 9186 exclusive pairs.
Goals reachable at 2 steps but mutually exclusive.
time: 3, 223 facts and 8000 exclusive pairs.
Goals reachable at 3 steps but mutually exclusive.

time: 4, 223 facts and 1939 exclusive pairs.
Goals reachable at 4 steps but mutually exclusive.
time: 5, 223 facts and 1584 exclusive pairs.
Goals first reachable in 5 steps.
2904 nodes created.

##
goals at time 6:
  arm-empty looks_block-a_red looks_block-b_blue looks_block-c_green clean_paint-brush is-color_paint-brush_none

----
** Turning off completeness check **
Converting graph to wff
number of action variables = 1076
number of fluent variables = 436
total number variables = 1512
number clauses = 137236
Instance unsatisfiable
Result is Unsat
Iteration was 0

----
time: 6, 223 facts and 1584 exclusive pairs.
716 new nodes added.

##
goals at time 7:
  arm-empty looks_block-a_red looks_block-b_blue looks_block-c_green clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 1495
number of fluent variables = 595
total number variables = 2090
number clauses = 200512
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 6 steps
time: 7, 223 facts and 1584 exclusive pairs.
716 new nodes added.

##

goals at time 8:
  arm-empty looks_block-a_red looks_block-b_blue looks_block-c_green clean_paint-brush
is-color_paint-brush_none

Converting graph to wff
number of action variables = 1914
number of fluent variables = 754
total number variables = 2668
number clauses = 248556
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 7 steps
time: 8, 223 facts and 1584 exclusive pairs.
716 new nodes added.

##
goals at time 9:
  arm-empty looks_block-a_red looks_block-b_blue looks_block-c_green clean_paint-brush
is-color_paint-brush_none

Converting graph to wff
number of action variables = 2333
number of fluent variables = 913
total number variables = 3246
number clauses = 296236
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 8 steps
time: 9, 223 facts and 1584 exclusive pairs.
716 new nodes added.

##
goals at time 10:
  arm-empty looks_block-a_red looks_block-b_blue looks_block-c_green clean_paint-brush
is-color_paint-brush_none

Converting graph to wff

number of action variables = 2752
number of fluent variables = 1072
total number variables = 3824
number clauses = 343916
Result is Sat
Iteration was 0
Performing plan justification:
   0 actions were pruned in 0.00 seconds

Begin plan
1 (pick-up red-sprayer)
2 (spray-paint block-a red-sprayer red)
3 (put-down red-sprayer)
4 (pick-up green-sprayer)
5 (spray-paint block-c green-sprayer green)
6 (stack green-sprayer paint-brush)
7 (pick-up blue-sprayer)
8 (spray-paint block-b blue-sprayer blue)
9 (put-down blue-sprayer)
End plan
----

9 total actions in plan
0 entries in hash table,
8 total set-creation steps (entries + hits + plan length - 1)
0 actions tried

##
Total elapsed time: 1.54 seconds
Time in milliseconds: 1535

##

akshaypeshave@akshaypeshavePC /cygdrive/c/cygwin/bin
$ blackbox -o domain.pddl -f p4.pddl -solver chaff
blackbox version 42
command line: blackbox -o domain.pddl -f p4.pddl -solver chaff

Begin solver specification
   -maxint   0   -maxsec 0.000000 chaff
End solver specification
Loading domain file: domain.pddl
Loading fact file: p4.pddl
Problem name: 4
Facts loaded.
time: 1, 70 facts and 41 exclusive pairs.
time: 2, 104 facts and 903 exclusive pairs.
time: 3, 106 facts and 805 exclusive pairs.

time: 4, 119 facts and 902 exclusive pairs.
time: 5, 122 facts and 738 exclusive pairs.
time: 6, 139 facts and 1250 exclusive pairs.
time: 7, 141 facts and 1059 exclusive pairs.
Goals reachable at 7 steps but mutually exclusive.
time: 8, 141 facts and 789 exclusive pairs.
Goals reachable at 8 steps but mutually exclusive.
time: 9, 141 facts and 686 exclusive pairs.
Goals reachable at 9 steps but mutually exclusive.
time: 10, 141 facts and 647 exclusive pairs.
Goals first reachable in 10 steps.
3523 nodes created.

##
goals at time 11:
  arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
** Turning off completeness check **
Converting graph to wff
number of action variables = 1501
number of fluent variables = 647
total number variables = 2148
number clauses = 89703
Instance unsatisfiable
Result is Unsat
Iteration was 0

----
time: 11, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 12:
  arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 1732
number of fluent variables = 739
total number variables = 2471
number clauses = 104961
Instance unsatisfiable

Result is Unsat
Iteration was 0

Can't solve in 11 steps
time: 12, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 13:
  arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 1963
number of fluent variables = 831
total number variables = 2794
number clauses = 120188
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 12 steps
time: 13, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 14:
  arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 2194
number of fluent variables = 923
total number variables = 3117
number clauses = 135399
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 13 steps

time: 14, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 15:
   arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 2425
number of fluent variables = 1015
total number variables = 3440
number clauses = 150610
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 14 steps
time: 15, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 16:
   arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 2656
number of fluent variables = 1107
total number variables = 3763
number clauses = 165821
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 15 steps
time: 16, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 17:

arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 2887
number of fluent variables = 1199
total number variables = 4086
number clauses = 181032
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 16 steps
time: 17, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 18:
  arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 3118
number of fluent variables = 1291
total number variables = 4409
number clauses = 196243
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 17 steps
time: 18, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 19:
  arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 3349
number of fluent variables = 1383
total number variables = 4732
number clauses = 211454
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 18 steps
time: 19, 141 facts and 647 exclusive pairs.
427 new nodes added.

###
goals at time 20:
  arm-empty looks_block-c_blue on-table_block-c looks_block-a_red on_block-a_block-b
clear_block-a looks_block-b_green on_block-b_block-c clean_paint-brush is-color_paint-brush_none

----
Converting graph to wff
number of action variables = 3580
number of fluent variables = 1475
total number variables = 5055
number clauses = 226665
Result is Sat
Iteration was 0
Performing plan justification:
   1 actions were pruned in 0.00 seconds

Begin plan
1 (unstack block-c block-b)
2 (put-down block-c)
3 (unstack block-b block-a)
4 (put-down block-b)
5 (pick-up paint-brush)
6 (load-paint-brush paint-brush blue blue-paint-can)
7 (paint-with-brush block-c paint-brush blue)
8 (clean-paint-brush paint-brush blue water-bucket)
9 (load-paint-brush paint-brush green green-paint-can)
10 (paint-with-brush block-b paint-brush green)
11 (clean-paint-brush paint-brush green water-bucket)
12 (put-down paint-brush)
13 (pick-up block-b)
14 (stack block-b block-c)

15 (pick-up red-sprayer)
16 (spray-paint block-a red-sprayer red)
17 (put-down red-sprayer)
18 (pick-up block-a)
19 (stack block-a block-b)
End plan
----

19 total actions in plan
0 entries in hash table,
18 total set-creation steps (entries + hits + plan length - 1)
0 actions tried

##

Total elapsed time: 2.01 seconds
Time in milliseconds: 2011

##

akshaypeshave@akshaypeshavePC /cygdrive/c/cygwin/bin
$ blackbox -o domain.pddl -f p5.pddl -solver chaff
blackbox version 42
command line: blackbox -o domain.pddl -f p5.pddl -solver chaff

Begin solver specification
   -maxint   0   -maxsec 0.000000 chaff
End solver specification
Loading domain file: domain.pddl
Loading fact file: p5.pddl
Problem name: 5
Facts loaded.
time: 1, 63 facts and 16 exclusive pairs.
time: 2, 67 facts and 36 exclusive pairs.
time: 3, 71 facts and 69 exclusive pairs.
time: 4, 79 facts and 170 exclusive pairs.
time: 5, 84 facts and 226 exclusive pairs.
time: 6, 99 facts and 582 exclusive pairs.
time: 7, 103 facts and 551 exclusive pairs.
time: 8, 117 facts and 901 exclusive pairs.
time: 9, 120 facts and 788 exclusive pairs.
time: 10, 138 facts and 1374 exclusive pairs.
time: 11, 141 facts and 1247 exclusive pairs.
Goals reachable at 11 steps but mutually exclusive.
time: 12, 141 facts and 926 exclusive pairs.
Goals reachable at 12 steps but mutually exclusive.
time: 13, 141 facts and 743 exclusive pairs.
Goals reachable at 13 steps but mutually exclusive.
time: 14, 141 facts and 647 exclusive pairs.
Goals first reachable in 14 steps.

4156 nodes created.

###
goals at time 15:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

** Turning off completeness check **
Converting graph to wff
number of action variables = 1686
number of fluent variables = 757
total number variables = 2443
number clauses = 92085
Instance unsatisfiable
Result is Unsat
Iteration was 0

----
time: 15, 141 facts and 647 exclusive pairs.
427 new nodes added.

###
goals at time 16:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 1917
number of fluent variables = 849
total number variables = 2766
number clauses = 107430
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 15 steps
time: 16, 141 facts and 647 exclusive pairs.
427 new nodes added.

###

goals at time 17:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 2148
number of fluent variables = 941
total number variables = 3089
number clauses = 122666
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 16 steps
time: 17, 141 facts and 647 exclusive pairs.
427 new nodes added.

###
goals at time 18:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 2379
number of fluent variables = 1033
total number variables = 3412
number clauses = 137877
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 17 steps
time: 18, 141 facts and 647 exclusive pairs.
427 new nodes added.

###
goals at time 19:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-

brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 2610
number of fluent variables = 1125
total number variables = 3735
number clauses = 153088
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 18 steps
time: 19, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 20:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 2841
number of fluent variables = 1217
total number variables = 4058
number clauses = 168299
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 19 steps
time: 20, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 21:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

```
-----------------------------------------------------
Converting graph to wff
number of action variables = 3072
number of fluent variables = 1309
total number variables = 4381
number clauses = 183510
Instance unsatisfiable
Result is Unsat
Iteration was 0


-----------------------------------------------------
Can't solve in 20 steps
time: 21, 141 facts and 647 exclusive pairs.
427 new nodes added.

########################################################
goals at time 22:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can


-----------------------------------------------------
Converting graph to wff
number of action variables = 3303
number of fluent variables = 1401
total number variables = 4704
number clauses = 198721
Instance unsatisfiable
Result is Unsat
Iteration was 0


-----------------------------------------------------
Can't solve in 21 steps
time: 22, 141 facts and 647 exclusive pairs.
427 new nodes added.

########################################################
goals at time 23:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can


-----------------------------------------------------
Converting graph to wff
```

number of action variables = 3534
number of fluent variables = 1493
total number variables = 5027
number clauses = 213932
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 22 steps
time: 23, 141 facts and 647 exclusive pairs.
427 new nodes added.

###
goals at time 24:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 3765
number of fluent variables = 1585
total number variables = 5350
number clauses = 229143
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 23 steps
time: 24, 141 facts and 647 exclusive pairs.
427 new nodes added.

###
goals at time 25:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 3996
number of fluent variables = 1677
total number variables = 5673

number clauses = 244354
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 24 steps
time: 25, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 26:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 4227
number of fluent variables = 1769
total number variables = 5996
number clauses = 259565
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 25 steps
time: 26, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 27:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 4458
number of fluent variables = 1861
total number variables = 6319
number clauses = 274776
Instance unsatisfiable
Result is Unsat

Iteration was 0

Can't solve in 26 steps
time: 27, 141 facts and 647 exclusive pairs.
427 new nodes added.

##
goals at time 28:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c clean_paint-brush is-color_paint-
brush_none
on_paint-brush_green-paint-can

Converting graph to wff
number of action variables = 4689
number of fluent variables = 1953
total number variables = 6642
number clauses = 289987
Result is Sat
Iteration was 0
Performing plan justification:
  1 actions were pruned in 0.00 seconds

Begin plan
1 (unstack paint-brush water-bucket)
2 (put-down paint-brush)
3 (unstack water-bucket blue-paint-can)
4 (put-down water-bucket)
5 (unstack blue-paint-can green-paint-can)
6 (put-down blue-paint-can)
7 (unstack green-paint-can red-sprayer)
8 (put-down green-paint-can)
9 (unstack block-c block-b)
10 (put-down block-c)
11 (unstack block-b block-a)
12 (put-down block-b)
13 (pick-up paint-brush)
14 (load-paint-brush paint-brush green green-paint-can)
15 (paint-with-brush block-b paint-brush green)
16 (clean-paint-brush paint-brush green water-bucket)
17 (load-paint-brush paint-brush blue blue-paint-can)
18 (paint-with-brush block-c paint-brush blue)
19 (clean-paint-brush paint-brush blue water-bucket)
20 (stack paint-brush green-paint-can)
21 (pick-up block-b)

22 (stack block-b block-c)
23 (pick-up red-sprayer)
24 (spray-paint block-a red-sprayer red)
25 (put-down red-sprayer)
26 (pick-up block-a)
27 (stack block-a block-b)
End plan
----

27 total actions in plan
0 entries in hash table,
26 total set-creation steps (entries + hits + plan length - 1)
0 actions tried

##
Total elapsed time: 9.79 seconds
Time in milliseconds: 9795

##

akshaypeshave@akshaypeshavePC /cygdrive/c/cygwin/bin
$ blackbox -o domain.pddl -f p6.pddl -solver chaff
blackbox version 42
command line: blackbox -o domain.pddl -f p6.pddl -solver chaff

Begin solver specification
    -maxint   0   -maxsec 0.000000 chaff
End solver specification
Loading domain file: domain.pddl
Loading fact file: p6.pddl
Problem name: 6
Facts loaded.
time: 1, 80 facts and 51 exclusive pairs.
time: 2, 135 facts and 2091 exclusive pairs.
time: 3, 137 facts and 1849 exclusive pairs.
time: 4, 151 facts and 1563 exclusive pairs.
time: 5, 155 facts and 1106 exclusive pairs.
time: 6, 173 facts and 1613 exclusive pairs.
time: 7, 176 facts and 1330 exclusive pairs.
Goals reachable at 7 steps but mutually exclusive.
time: 8, 176 facts and 1020 exclusive pairs.
Goals reachable at 8 steps but mutually exclusive.
time: 9, 176 facts and 963 exclusive pairs.
Goals reachable at 9 steps but mutually exclusive.
time: 10, 176 facts and 924 exclusive pairs.
Goals first reachable in 10 steps.
4606 nodes created.

##

goals at time 11:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

** Turning off completeness check **
Converting graph to wff
number of action variables = 2077
number of fluent variables = 878
total number variables = 2955
number clauses = 167775
Instance unsatisfiable
Result is Unsat
Iteration was 0

----
time: 11, 176 facts and 924 exclusive pairs.
559 new nodes added.

##
goals at time 12:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff
number of action variables = 2399
number of fluent variables = 1002
total number variables = 3401
number clauses = 196400
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 11 steps
time: 12, 176 facts and 924 exclusive pairs.
559 new nodes added.

##
goals at time 13:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff

number of action variables = 2721
number of fluent variables = 1126
total number variables = 3847
number clauses = 225005
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 12 steps
time: 13, 176 facts and 924 exclusive pairs.
559 new nodes added.

###
goals at time 14:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff
number of action variables = 3043
number of fluent variables = 1250
total number variables = 4293
number clauses = 253600
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 13 steps
time: 14, 176 facts and 924 exclusive pairs.
559 new nodes added.

###
goals at time 15:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff
number of action variables = 3365
number of fluent variables = 1374
total number variables = 4739
number clauses = 282195
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 14 steps
time: 15, 176 facts and 924 exclusive pairs.
559 new nodes added.

##
goals at time 16:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff
number of action variables = 3687
number of fluent variables = 1498
total number variables = 5185
number clauses = 310790
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 15 steps
time: 16, 176 facts and 924 exclusive pairs.
559 new nodes added.

##
goals at time 17:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff
number of action variables = 4009
number of fluent variables = 1622
total number variables = 5631
number clauses = 339385
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 16 steps
time: 17, 176 facts and 924 exclusive pairs.
559 new nodes added.

##

goals at time 18:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff
number of action variables = 4331
number of fluent variables = 1746
total number variables = 6077
number clauses = 367980
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 17 steps
time: 18, 176 facts and 924 exclusive pairs.
559 new nodes added.

###
goals at time 19:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff
number of action variables = 4653
number of fluent variables = 1870
total number variables = 6523
number clauses = 396575
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 18 steps
time: 19, 176 facts and 924 exclusive pairs.
559 new nodes added.

###
goals at time 20:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff

number of action variables = 4975
number of fluent variables = 1994
total number variables = 6969
number clauses = 425170
Instance unsatisfiable
Result is Unsat
Iteration was 0

Can't solve in 19 steps
time: 20, 176 facts and 924 exclusive pairs.
559 new nodes added.

###
goals at time 21:
  arm-empty looks_block-a_red looks_block-b_green looks_block-c_blue clear_block-a
on_block-a_block-b on_block-b_block-c on-table_block-c

Converting graph to wff
number of action variables = 5297
number of fluent variables = 2118
total number variables = 7415
number clauses = 453765
Result is Sat
Iteration was 0
Performing plan justification:
   1 actions were pruned in 0.00 seconds

Begin plan
1 (unstack block-c block-b)
2 (put-down block-c)
3 (unstack block-b block-a)
4 (put-down block-b)
5 (pick-up paint-brush-2)
6 (load-paint-brush paint-brush-2 green green-paint-can)
7 (paint-with-brush block-b paint-brush-2 green)
8 (put-down paint-brush-2)
9 (pick-up paint-brush-3)
10 (load-paint-brush paint-brush-3 red red-paint-can)
11 (paint-with-brush block-a paint-brush-3 red)
12 (put-down paint-brush-3)
13 (pick-up paint-brush-1)
14 (load-paint-brush paint-brush-1 blue blue-paint-can)
15 (paint-with-brush block-c paint-brush-1 blue)
16 (put-down paint-brush-1)
17 (pick-up block-b)

18 (stack block-b block-c)
19 (pick-up block-a)
20 (stack block-a block-b)
End plan

----

20 total actions in plan
0 entries in hash table,
19 total set-creation steps (entries + hits + plan length - 1)
0 actions tried

###
Total elapsed time: 10.20 seconds
Time in milliseconds: 10195

###

akshaypeshave@akshaypeshavePC /cygdrive/c/cygwin/bin
$