

## Résultats de ASP et MCTS

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Il faut placer le dossier « mtcs » dans les dossier « pddl4j\src\main\java\fr\uga\pddl4j\examples »

### **Commandes (sur Windows) pour compiler puis lancer les deux programmes :**

Compilation :

```
javac -d classes -cp build\libs\pddl4j-4.0.0.jar;lib\* src\main\java\fr\uga\pddl4j\examples\asp\  
Node.java src\main\java\fr\uga\pddl4j\examples\asp\ASP.java  
javac -d classes -cp build\libs\pddl4j-4.0.0.jar;lib\* src\main\java\fr\uga\pddl4j\examples\mcts\  
Node.java src\main\java\fr\uga\pddl4j\examples\mcts\MCTS.java
```

Vérification si cela fonctionne :

```
java -cp classes;build\libs\pddl4j-4.0.0.jar;lib\* fr.uga.pddl4j.examples.asp.ASP --help  
java -cp classes;build\libs\pddl4j-4.0.0.jar;lib\* fr.uga.pddl4j.examples.mcts.MCTS --help
```

Exemples de Commandes pour lancer les tests :

```
java -cp classes;build\libs\pddl4j-4.0.0.jar fr.uga.pddl4j.examples.asp.ASP  
src/test/resources/benchmarks/pddl/ ipc2000/ blocks/ strips-typed/ domain.pddl  
src/test/resources/benchmarks/pddl/ ipc2000/ blocks/ strips-typed/ p001.pddl
```

```
java -cp classes;build\libs\pddl4j-4.0.0.jar fr.uga.pddl4j.examples.mcts.MCTS  
src/test/resources/benchmarks/pddl/ ipc2000/ blocks/ strips-typed/ domain.pddl  
src/test/resources/benchmarks/pddl/ ipc2000/ blocks/ strips-typed/ p001.pddl
```

### **Résultats :**

| PXXX                                 | ASP  | MCTS  |
|--------------------------------------|--|---|
| <b>ipc2000/ blocks/ strips-typed</b> |  |   |
| p001                                 | <pre>0: (pick-up b) [0] 1: (stack b a) [0] 2: (pick-up c) [0] 3: (stack c b) [0] 4: (pick-up d) [0] 5: (stack d c) [0]  time spent: 0,07 seconds parsing             0,17 seconds encoding             0,02 seconds searching             0,26 seconds total time  memory used: 0,19 MBytes for problem representation             0,00 MBytes for searching             0,19 MBytes total</pre> | <pre>00: ( pick-up d) [0] 01: ( stack d c) [0] 02: (unstack d c) [0] 03: ( put-down d) [0] 04: ( pick-up b) [0] 05: ( stack b a) [0] 06: (unstack b a) [0] 07: ( stack b a) [0] 08: ( pick-up c) [0] 09: ( stack c d) [0] 10: (unstack b a) [0] 11: ( stack b a) [0] 12: (unstack c d) [0] 13: ( stack c b) [0] 14: (unstack c b) [0] 15: ( stack c b) [0] 16: ( pick-up d) [0] 17: ( put-down d) [0] 18: ( pick-up d) [0] 19: ( stack d c) [0]  time spent: 0,08 seconds parsing             0,18 seconds encoding             0,15 seconds searching             0,40 seconds total time  memory used: 0,19 MBytes for problem representation             0,00 MBytes for searching</pre> |

|       |   |  |
|-------|---|--|
|       |   | 0,19 MBytes total  |
| p002  | <p>00: (unstack b c) [0]<br/>     01: ( put-down b) [0]<br/>     02: (unstack c a) [0]<br/>     03: ( put-down c) [0]<br/>     04: (unstack a d) [0]<br/>     05: ( stack a b) [0]<br/>     06: ( pick-up c) [0]<br/>     07: ( stack c a) [0]<br/>     08: ( pick-up d) [0]<br/>     09: ( stack d c) [0]</p> <p>time spent: 0,07 seconds parsing<br/>     0,19 seconds encoding<br/>     0,04 seconds searching<br/>     0,29 seconds total time</p> <p>memory used: 0,18 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     0,19 MBytes total</p>   | <p>00: (unstack b c) [0]<br/>     01: ( stack b c) [0]<br/>     02: (unstack b c) [0]<br/>     03: ( put-down b) [0]<br/>     04: (unstack c a) [0]<br/>     05: ( put-down c) [0]<br/>     06: ( pick-up c) [0]<br/>     07: ( put-down c) [0]<br/>     08: (unstack a d) [0]<br/>     09: ( stack a b) [0]<br/>     10: ( pick-up c) [0]<br/>     11: ( stack c a) [0]<br/>     12: ( pick-up d) [0]<br/>     13: ( stack d c) [0]</p> <p>time spent: 0,11 seconds parsing<br/>     0,22 seconds encoding<br/>     0,13 seconds searching<br/>     0,46 seconds total time</p> <p>memory used: 0,18 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     0,18 MBytes total</p>  |
| p0003 | <p>0: (unstack c b) [0]<br/>     1: ( stack c d) [0]<br/>     2: ( pick-up b) [0]<br/>     3: ( stack b c) [0]<br/>     4: ( pick-up a) [0]<br/>     5: ( stack a b) [0]</p> <p>time spent: 0,09 seconds parsing<br/>     0,15 seconds encoding<br/>     0,04 seconds searching<br/>     0,27 seconds total time</p> <p>memory used: 0,19 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     0,19 MBytes total</p>   | <p>00: (unstack c b) [0]<br/>     01: ( stack c a) [0]<br/>     02: (unstack c a) [0]<br/>     03: ( stack c d) [0]<br/>     04: (unstack c d) [0]<br/>     05: ( stack c a) [0]<br/>     06: (unstack c a) [0]<br/>     07: ( stack c d) [0]<br/>     08: ( pick-up a) [0]<br/>     09: ( stack a b) [0]<br/>     10: (unstack a b) [0]<br/>     11: ( put-down a) [0]<br/>     12: ( pick-up a) [0]<br/>     13: ( stack a c) [0]<br/>     14: (unstack a c) [0]<br/>     15: ( put-down a) [0]<br/>     16: ( pick-up b) [0]<br/>     17: ( stack b c) [0]<br/>     18: ( pick-up a) [0]<br/>     19: ( stack a b) [0]</p> <p>time spent: 0,07 seconds parsing<br/>     0,22 seconds encoding<br/>     0,06 seconds searching<br/>     0,35 seconds total time</p> <p>memory used: 0,19 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     0,19 MBytes total</p> |
| p004  | <p>00: (unstack c e) [0]<br/>     01: ( put-down c) [0]<br/>     02: ( pick-up d) [0]<br/>     03: ( stack d c) [0]<br/>     04: (unstack e b) [0]<br/>     05: ( put-down e) [0]<br/>     06: (unstack b a) [0]<br/>     07: ( stack b d) [0]<br/>     08: ( pick-up e) [0]<br/>     09: ( stack e b) [0]<br/>     10: ( pick-up a) [0]<br/>     11: ( stack a e) [0]</p> <p>time spent: 0,08 seconds parsing<br/>     0,20 seconds encoding<br/>     0,07 seconds searching<br/>     0,35 seconds total time</p> <p>memory used: 0,26 MBytes for problem representation<br/>     0,01 MBytes for searching<br/>     0,27 MBytes total</p> | <p>00: (unstack d c) [0]<br/>     01: ( stack d c) [0]<br/>     02: (unstack d c) [0]<br/>     03: ( stack d c) [0]<br/>     04: (unstack e b) [0]<br/>     05: ( put-down e) [0]<br/>     06: (unstack b a) [0]<br/>     07: ( stack b d) [0]<br/>     08: (unstack b d) [0]<br/>     09: ( stack b d) [0]<br/>     10: ( pick-up e) [0]<br/>     11: ( stack e b) [0]<br/>     12: (unstack e b) [0]<br/>     13: ( stack e a) [0]<br/>     14: (unstack e a) [0]<br/>     15: ( stack e b) [0]<br/>     16: ( pick-up a) [0]<br/>     17: ( stack a e) [0]</p> <p>time spent: 0,07 seconds parsing<br/>     0,17 seconds encoding<br/>     0,14 seconds searching</p>   |

|      |  |   |
|------|--|---|
|      |  | <p>0,37 seconds total time</p> <p>memory used: 0,26 MBytes for problem representation<br/>0,00 MBytes for searching<br/>0,26 MBytes total</p>   |
| p005 | <p>00: (unstack b a) [0]<br/>01: ( stack b c) [0]<br/>02: (unstack a d) [0]<br/>03: ( stack a e) [0]<br/>04: (unstack b c) [0]<br/>05: ( stack b a) [0]<br/>06: ( pick-up c) [0]<br/>07: ( stack c b) [0]<br/>08: ( pick-up d) [0]<br/>09: ( stack d c) [0]</p> <p>time spent: 0,08 seconds parsing<br/>0,16 seconds encoding<br/>0,07 seconds searching<br/>0,31 seconds total time</p> <p>memory used: 0,26 MBytes for problem representation<br/>0,01 MBytes for searching<br/>0,27 MBytes total</p>  | <p>0: (unstack c d) [0]<br/>1: ( stack c d) [0]<br/>2: (unstack c d) [0]<br/>3: ( stack c b) [0]<br/>4: ( pick-up d) [0]<br/>5: ( stack d c) [0]</p> <p>time spent: 0,07 seconds parsing<br/>0,16 seconds encoding<br/>0,10 seconds searching<br/>0,33 seconds total time</p> <p>memory used: 0,26 MBytes for problem representation<br/>0,00 MBytes for searching<br/>0,26 MBytes total</p>  |
| p006 | <p>00: (unstack d e) [0]<br/>01: ( put-down d) [0]<br/>02: (unstack e c) [0]<br/>03: ( put-down e) [0]<br/>04: (unstack c a) [0]<br/>05: ( stack c d) [0]<br/>06: (unstack a b) [0]<br/>07: ( put-down a) [0]<br/>08: ( pick-up e) [0]<br/>09: ( stack e a) [0]<br/>10: ( pick-up b) [0]<br/>11: ( stack b e) [0]<br/>12: (unstack c d) [0]<br/>13: ( stack c b) [0]<br/>14: ( pick-up d) [0]<br/>15: ( stack d c) [0]</p> <p>time spent: 0,06 seconds parsing<br/>0,15 seconds encoding<br/>0,08 seconds searching<br/>0,30 seconds total time</p> <p>memory used: 0,26 MBytes for problem representation<br/>0,02 MBytes for searching<br/>0,28 MBytes total</p> | <p>00: (unstack c b) [0]<br/>01: ( put-down c) [0]<br/>02: (unstack b d) [0]<br/>03: ( stack b e) [0]<br/>04: ( pick-up d) [0]<br/>05: ( put-down d) [0]<br/>06: ( pick-up c) [0]<br/>07: ( stack c d) [0]<br/>08: (unstack c d) [0]<br/>09: ( stack c b) [0]<br/>10: ( pick-up d) [0]<br/>11: ( stack d c) [0]</p> <p>time spent: 0,07 seconds parsing<br/>0,15 seconds encoding<br/>0,15 seconds searching<br/>0,38 seconds total time</p> <p>memory used: 0,26 MBytes for problem representation<br/>0,00 MBytes for searching<br/>0,26 MBytes total</p>   |
| p007 | <p>00: (unstack d a) [0]<br/>01: ( put-down d) [0]<br/>02: (unstack f e) [0]<br/>03: ( stack f d) [0]<br/>04: (unstack e b) [0]<br/>05: ( stack e f) [0]<br/>06: (unstack a c) [0]<br/>07: ( stack a e) [0]<br/>08: ( pick-up b) [0]<br/>09: ( stack b a) [0]<br/>10: ( pick-up c) [0]<br/>11: ( stack c b) [0]</p> <p>time spent: 0,07 seconds parsing<br/>0,20 seconds encoding<br/>0,04 seconds searching<br/>0,31 seconds total time</p> <p>memory used: 0,35 MBytes for problem representation<br/>0,01 MBytes for searching<br/>0,35 MBytes total</p>  | <p>00: (unstack b e) [0]<br/>01: ( put-down b) [0]<br/>02: (unstack a c) [0]<br/>03: ( stack a e) [0]<br/>04: (unstack a e) [0]<br/>05: ( stack a e) [0]<br/>06: ( pick-up b) [0]<br/>07: ( stack b a) [0]<br/>08: ( pick-up c) [0]<br/>09: ( put-down c) [0]<br/>10: ( pick-up c) [0]<br/>11: ( put-down c) [0]<br/>12: (unstack b a) [0]<br/>13: ( stack b a) [0]<br/>14: ( pick-up c) [0]<br/>15: ( stack c b) [0]</p> <p>time spent: 0,08 seconds parsing<br/>0,24 seconds encoding<br/>0,24 seconds searching<br/>0,55 seconds total time</p> <p>memory used: 0,35 MBytes for problem representation<br/>0,00 MBytes for searching</p> |

|      |  | 0,35 MBytes total   |
|------|--|---|
| p008 | <p>00: (unstack a f) [0]<br/>     01: ( stack a d) [0]<br/>     02: ( pick-up b) [0]<br/>     03: ( stack b a) [0]<br/>     04: ( pick-up c) [0]<br/>     05: ( stack c b) [0]<br/>     06: ( pick-up f) [0]<br/>     07: ( stack f c) [0]<br/>     08: ( pick-up e) [0]<br/>     09: ( stack e f) [0]</p> <p>time spent: 0,08 seconds parsing<br/>     0,20 seconds encoding<br/>     0,07 seconds searching<br/>     0,35 seconds total time</p> <p>memory used: 0,35 MBytes for problem representation<br/>     0,01 MBytes for searching<br/>     0,36 MBytes total</p>  | <p>00: ( pick-up f) [0]<br/>     01: ( stack f e) [0]<br/>     02: (unstack f e) [0]<br/>     03: ( put-down f) [0]<br/>     04: (unstack e c) [0]<br/>     05: ( put-down e) [0]<br/>     06: ( pick-up f) [0]<br/>     07: ( stack f c) [0]<br/>     08: ( pick-up e) [0]<br/>     09: ( stack e f) [0]</p> <p>time spent: 0,07 seconds parsing<br/>     0,17 seconds encoding<br/>     0,30 seconds searching<br/>     0,54 seconds total time</p> <p>memory used: 0,35 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     0,35 MBytes total</p>  |
| p009 | <p>00: (unstack a d) [0]<br/>     01: ( put-down a) [0]<br/>     02: (unstack d b) [0]<br/>     03: ( put-down d) [0]<br/>     04: (unstack b f) [0]<br/>     05: ( stack b a) [0]<br/>     06: (unstack f e) [0]<br/>     07: ( put-down f) [0]<br/>     08: (unstack e c) [0]<br/>     09: ( put-down e) [0]<br/>     10: ( pick-up c) [0]<br/>     11: ( stack c d) [0]<br/>     12: (unstack b a) [0]<br/>     13: ( stack b c) [0]<br/>     14: ( pick-up a) [0]<br/>     15: ( stack a b) [0]<br/>     16: ( pick-up f) [0]<br/>     17: ( stack f a) [0]<br/>     18: ( pick-up e) [0]<br/>     19: ( stack e f) [0]</p> <p>time spent: 0,06 seconds parsing<br/>     0,17 seconds encoding<br/>     0,23 seconds searching<br/>     0,46 seconds total time</p> <p>memory used: 0,35 MBytes for problem representation<br/>     0,25 MBytes for searching<br/>     0,60 MBytes total</p> | <p>00: (unstack f a) [0]<br/>     01: ( stack f a) [0]<br/>     02: (unstack f a) [0]<br/>     03: ( stack f b) [0]<br/>     04: (unstack f b) [0]<br/>     05: ( stack f e) [0]<br/>     06: ( pick-up a) [0]<br/>     07: ( stack a f) [0]<br/>     08: (unstack a f) [0]<br/>     09: ( stack a b) [0]<br/>     10: (unstack f e) [0]<br/>     11: ( put-down f) [0]<br/>     12: ( pick-up e) [0]<br/>     13: ( put-down e) [0]<br/>     14: ( pick-up f) [0]<br/>     15: ( stack f a) [0]<br/>     16: ( pick-up e) [0]<br/>     17: ( stack e f) [0]</p> <p>time spent: 0,06 seconds parsing<br/>     0,18 seconds encoding<br/>     3,86 seconds searching<br/>     4,10 seconds total time</p> <p>memory used: 0,35 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     0,35 MBytes total</p> |
| p010 | <p>00: (unstack e g) [0]<br/>     01: ( put-down e) [0]<br/>     02: (unstack g b) [0]<br/>     03: ( put-down g) [0]<br/>     04: (unstack b a) [0]<br/>     05: ( stack b g) [0]<br/>     06: (unstack a f) [0]<br/>     07: ( put-down a) [0]<br/>     08: (unstack f c) [0]<br/>     09: ( stack f e) [0]<br/>     10: (unstack c d) [0]<br/>     11: ( stack c f) [0]<br/>     12: (unstack b g) [0]<br/>     13: ( stack b c) [0]<br/>     14: ( pick-up d) [0]<br/>     15: ( stack d b) [0]<br/>     16: ( pick-up g) [0]<br/>     17: ( stack g d) [0]<br/>     18: ( pick-up a) [0]<br/>     19: ( stack a g) [0]</p> <p>time spent: 0,07 seconds parsing<br/>     0,20 seconds encoding<br/>     0,36 seconds searching<br/>     0,63 seconds total time</p>  | <p>00: (unstack g d) [0]<br/>     01: ( stack g a) [0]<br/>     02: (unstack d b) [0]<br/>     03: ( put-down d) [0]<br/>     04: (unstack g a) [0]<br/>     05: ( stack g a) [0]<br/>     06: ( pick-up d) [0]<br/>     07: ( stack d b) [0]<br/>     08: (unstack g a) [0]<br/>     09: ( stack g a) [0]<br/>     10: (unstack d b) [0]<br/>     11: ( stack d b) [0]<br/>     12: (unstack g a) [0]<br/>     13: ( stack g d) [0]<br/>     14: ( pick-up a) [0]<br/>     15: ( put-down a) [0]<br/>     16: (unstack g d) [0]<br/>     17: ( stack g d) [0]<br/>     18: ( pick-up a) [0]<br/>     19: ( stack a g) [0]</p> <p>time spent: 0,07 seconds parsing<br/>     0,22 seconds encoding<br/>     0,47 seconds searching<br/>     0,76 seconds total time</p>  |

|                               |  |  |
|-------------------------------|--|--|
|                               | <p>memory used: 0,45 MBytes for problem representation<br/>0,19 MBytes for searching<br/>0,64 MBytes total</p>   | <p>memory used: 0,45 MBytes for problem representation<br/>0,00 MBytes for searching<br/>0,45 MBytes total</p>   |
| <b>ipc1998/gripper/strips</b> |  |  |
| p01                           | <p>0: ( move rooma roomb) [0]<br/>1: (pick ball1 rooma right) [0]<br/>2: (drop ball1 roomb right) [0]<br/>3: ( pick ball4 rooma left) [0]<br/>4: ( drop ball4 roomb left) [0]<br/>5: ( pick ball3 rooma left) [0]<br/>6: ( drop ball3 roomb left) [0]<br/>7: ( pick ball2 rooma left) [0]<br/>8: ( drop ball2 roomb left) [0]</p> <p>time spent: 0,06 seconds parsing<br/>0,14 seconds encoding<br/>0,22 seconds searching<br/>0,42 seconds total time</p> <p>memory used: 0,11 MBytes for problem representation<br/>0,21 MBytes for searching<br/>0,33 MBytes total</p>  | <p>00: ( pick ball1 rooma left) [0]<br/>01: ( move rooma roomb) [0]<br/>02: ( pick ball3 rooma left) [0]<br/>03: ( pick ball1 rooma left) [0]<br/>04: ( drop ball3 roomb left) [0]<br/>05: ( pick ball2 rooma left) [0]<br/>06: ( pick ball3 roomb right) [0]<br/>08: ( pick ball1 rooma left) [0]<br/>09: ( drop ball1 roomb left) [0]<br/>10: ( move roomb roomb) [0]<br/>11: (pick ball4 rooma right) [0]<br/>12: ( pick ball1 rooma left) [0]<br/>13: (drop ball4 rooma right) [0]<br/>14: (drop ball3 rooma right) [0]<br/>15: (drop ball4 roomb right) [0]<br/>16: ( pick ball2 rooma left) [0]<br/>17: ( pick ball1 rooma left) [0]<br/>18: ( drop ball2 roomb left) [0]</p> <p>time spent: 0,07 seconds parsing<br/>0,12 seconds encoding<br/>0,11 seconds searching<br/>0,29 seconds total time</p> <p>memory used: 0,11 MBytes for problem representation<br/>0,00 MBytes for searching<br/>0,11 MBytes total</p>          |
| p02                           | <p>00: ( move rooma roomb) [0]<br/>01: (pick ball5 rooma right) [0]<br/>02: (drop ball5 roomb right) [0]<br/>03: ( pick ball2 rooma left) [0]<br/>04: ( drop ball2 roomb left) [0]<br/>05: (pick ball6 rooma right) [0]<br/>06: (drop ball6 roomb right) [0]<br/>07: ( pick ball4 rooma left) [0]<br/>08: ( drop ball4 roomb left) [0]<br/>09: (pick ball3 rooma right) [0]<br/>10: (drop ball3 roomb right) [0]<br/>11: ( pick ball1 rooma left) [0]<br/>12: ( drop ball1 roomb left) [0]</p> <p>time spent: 0,08 seconds parsing<br/>0,14 seconds encoding<br/>1,80 seconds searching<br/>2,02 seconds total time</p> <p>memory used: 0,15 MBytes for problem representation<br/>7,09 MBytes for searching<br/>7,23 MBytes total</p> | <p>00: (drop ball1 rooma right) [0]<br/>01: ( pick ball6 roomb left) [0]<br/>02: (pick ball5 roomb right) [0]<br/>03: ( pick ball5 roomb left) [0]<br/>04: (pick ball2 rooma right) [0]<br/>05: ( pick ball3 roomb left) [0]<br/>06: ( drop ball6 rooma left) [0]<br/>07: ( drop ball6 rooma left) [0]<br/>08: ( pick ball6 roomb left) [0]<br/>09: (drop ball3 roomb right) [0]<br/>10: (drop ball3 roomb right) [0]<br/>11: (pick ball4 rooma right) [0]<br/>12: ( pick ball5 rooma left) [0]<br/>13: ( drop ball4 roomb left) [0]<br/>14: ( drop ball5 roomb left) [0]<br/>15: (pick ball3 rooma right) [0]<br/>16: ( drop ball5 rooma left) [0]<br/>17: (drop ball2 roomb right) [0]</p> <p>time spent: 0,06 seconds parsing<br/>0,14 seconds encoding<br/>0,13 seconds searching<br/>0,33 seconds total time</p> <p>memory used: 0,15 MBytes for problem representation<br/>0,00 MBytes for searching<br/>0,15 MBytes total</p> |
| p03                           | <p>00: ( move rooma roomb) [0]<br/>01: (pick ball4 rooma right) [0]<br/>02: (drop ball4 roomb right) [0]<br/>03: ( pick ball2 rooma right) [0]<br/>04: ( drop ball2 roomb right) [0]<br/>05: ( pick ball5 rooma left) [0]<br/>06: ( drop ball5 roomb left) [0]<br/>07: (pick ball6 rooma right) [0]<br/>08: ( drop ball6 roomb right) [0]<br/>09: (pick ball8 rooma right) [0]<br/>10: (drop ball8 roomb right) [0]<br/>11: (pick ball3 rooma right) [0]</p>   | <p>00: (pick ball3 roomb right) [0]<br/>01: ( drop ball8 roomb left) [0]<br/>02: ( drop ball1 roomb left) [0]<br/>03: (drop ball2 rooma right) [0]<br/>04: ( pick ball3 roomb left) [0]<br/>05: ( pick ball8 roomb left) [0]<br/>06: (pick ball2 rooma right) [0]<br/>07: (drop ball3 rooma right) [0]<br/>08: (pick ball3 rooma right) [0]<br/>09: (drop ball8 roomb right) [0]<br/>10: (drop ball3 roomb right) [0]<br/>11: (drop ball6 roomb right) [0]</p>   |

|     |  |   |
|-----|--|---|
|     | <pre> 12: (drop ball3 roomb right) [0] 13: (pick ball7 rooma right) [0] 14: (drop ball7 roomb right) [0] 15: (pick ball1 rooma right) [0] 16: (drop ball1 roomb right) [0]  time spent: 0,09 seconds parsing            0,18 seconds encoding            50,05 seconds searching            50,31 seconds total time  memory used: 0,18 MBytes for problem representation            291,20 MBytes for searching            291,38 MBytes total </pre> | <p>time spent: 0,07 seconds parsing<br/>             0,13 seconds encoding<br/>             0,21 seconds searching<br/>             0,40 seconds total time</p> <p>memory used: 0,18 MBytes for problem representation<br/>             0,00 MBytes for searching<br/>             0,18 MBytes total</p>  |
| p04 | java.lang.OutOfMemoryError: Java heap space:<br>failed reallocation of scalar replaced objects   | <pre> 0: ( drop ball8 rooma left) [0] 1: (drop ball10 roomb right) [0] 2: ( drop ball2 rooma right) [0] 3: ( pick ball6 roomb left) [0] 4: ( drop ball4 rooma left) [0] 5: ( pick ball8 rooma right) [0] 6: ( drop ball1 roomb right) [0]  time spent: 0,08 seconds parsing            0,15 seconds encoding            0,92 seconds searching            1,15 seconds total time  memory used: 0,21 MBytes for problem representation            0,00 MBytes for searching            0,21 MBytes total </pre>   |
| p05 | java.lang.OutOfMemoryError: Java heap space  | <pre> 00: (pick ball10 roomb right) [0] 01: (drop ball11 roomb right) [0] 02: ( drop ball8 roomb left) [0] 03: (pick ball12 roomb right) [0] 04: ( drop ball11 rooma left) [0] 05: ( pick ball6 roomb left) [0] 06: ( pick ball7 rooma right) [0] 07: ( drop ball9 roomb right) [0] 08: ( drop ball5 roomb left) [0] 09: ( pick ball11 roomb left) [0] 10: ( pick ball1 rooma right) [0] 11: ( drop ball9 roomb left) [0] 12: ( pick ball11 rooma left) [0] 13: ( pick ball3 roomb right) [0] 14: ( pick ball2 rooma left) [0] 15: ( drop ball2 roomb left) [0]  time spent: 0,10 seconds parsing            0,30 seconds encoding            2,17 seconds searching            2,57 seconds total time  memory used: 0,25 MBytes for problem representation            0,00 MBytes for searching            0,25 MBytes total </pre> |
| p06 | java.lang.OutOfMemoryError: Java heap space  | <pre> 00: ( drop ball10 roomb left) [0] 01: (drop ball13 roomb right) [0] 02: ( pick ball3 roomb left) [0] 03: ( pick ball9 rooma right) [0] 04: ( pick ball7 roomb right) [0] 05: ( drop ball2 rooma right) [0] 06: ( pick ball3 roomb left) [0] 07: ( drop ball2 rooma left) [0] 08: (drop ball10 roomb right) [0] 09: ( drop ball4 roomb left) [0] 10: ( pick ball3 roomb left) [0] 11: ( drop ball8 rooma left) [0] 12: ( drop ball7 rooma right) [0] 13: (pick ball12 roomb right) [0] 14: ( drop ball9 roomb right) [0]  time spent: 0,09 seconds parsing            0,22 seconds encoding            2,99 seconds searching </pre>   |

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|  |  | <p>3,30 seconds total time</p> <p>memory used: 0,28 MBytes for problem representation<br/>0,00 MBytes for searching<br/>0,28 MBytes total</p>  |
| <b>ipc2002/depots/strips-automatic</b> |  |  |
| p01                                    | <pre> 00: ( lift hoist0 crate1 pallet0 depot0) [0] 01: ( lift hoist1 crate0 pallet1 distributor0) [0] 02: ( load hoist0 crate1 truck1 depot0) [0] 03: ( drive truck1 depot0 distributor0) [0] 04: ( load hoist1 crate0 truck1 distributor0) [0] 05: ( unload hoist1 crate1 truck1 distributor0) [0] 06: ( drive truck1 distributor0 distributor1) [0] 07: ( drop hoist1 crate1 pallet1 distributor0) [0] 08: ( unload hoist2 crate0 truck1 distributor1) [0] 09: ( drop hoist2 crate0 pallet2 distributor1) [0]  time spent: 0,13 seconds parsing             0,23 seconds encoding             0,06 seconds searching             0,41 seconds total time  memory used: 0,41 MBytes for problem representation             0,01 MBytes for searching             0,42 MBytes total </pre>   | <pre> 00: ( drive truck0 distributor1 depot0) [0] 01: ( drive truck0 depot0 depot0) [0] 02: ( unload hoist0 crate0 truck0 depot0) [0] 03: ( drive truck0 depot0 distributor0) [0] 04: ( drive truck0 distributor0 distributor1) [0] 05: ( load hoist0 crate0 truck1 depot0) [0] 06: ( drive truck1 depot0 distributor1) [0] 07: ( drive truck0 distributor1 distributor0) [0] 08: ( drive truck0 distributor0 distributor1) [0] 09: ( unload hoist2 crate0 truck1 distributor1) [0] 10: ( drive truck1 distributor1 depot0) [0] 11: ( lift hoist1 crate1 pallet1 distributor0) [0] 12: ( drive truck1 depot0 distributor0) [0] 13: ( drop hoist2 crate0 pallet2 distributor1) [0] 14: ( drive truck1 distributor0 distributor0) [0] 15: ( drive truck0 distributor1 distributor1) [0] 16: ( drive truck0 distributor1 depot0) [0] 17: ( drop hoist1 crate1 pallet1 distributor0) [0]  time spent: 0,08 seconds parsing             0,22 seconds encoding             0,38 seconds searching             0,68 seconds total time  memory used: 0,41 MBytes for problem representation             0,00 MBytes for searching             0,41 MBytes total </pre>  |
| p02                                    | <pre> 00: ( lift hoist0 crate0 pallet0 depot0) [0] 01: ( load hoist0 crate0 truck0 depot0) [0] 02: ( lift hoist2 crate2 crate1 distributor1) [0] 03: ( drive truck0 depot0 distributor1) [0] 04: ( load hoist2 crate2 truck0 distributor1) [0] 05: ( lift hoist2 crate1 pallet2 distributor0) [0] 06: ( load hoist2 crate1 truck0 distributor1) [0] 07: ( unload hoist2 crate0 truck0 distributor1) [0] 08: ( drive truck0 distributor1 depot0) [0] 09: ( unload hoist0 crate2 truck0 depot0) [0] 10: ( drive truck0 depot0 distributor0) [0] 11: ( drop hoist0 crate2 pallet0 depot0) [0] 12: ( unload hoist1 crate1 truck0 distributor0) [0] 13: ( drop hoist1 crate1 crate3 distributor0) [0] 14: ( drop hoist2 crate0 pallet2 distributor1) [0]  time spent: 0,11 seconds parsing             0,40 seconds encoding             0,19 seconds searching             0,69 seconds total time  memory used: 0,90 MBytes for problem representation             0,05 MBytes for searching             0,95 MBytes total </pre> | <pre> 00: ( drive truck1 distributor1 depot0) [0] 01: ( drive truck1 depot0 distributor1) [0] 02: ( drive truck1 distributor1 depot0) [0] 03: ( drop hoist0 crate2 pallet0 depot0) [0] 04: ( lift hoist1 crate3 pallet1 distributor0) [0] 05: ( drive truck1 depot0 distributor0) [0] 06: ( lift hoist0 crate2 pallet0 depot0) [0] 07: ( drop hoist1 crate3 pallet1 distributor0) [0] 08: ( unload hoist1 crate1 truck1 distributor0) [0] 09: ( drive truck1 distributor0 depot0) [0] 10: ( drive truck0 depot0 depot0) [0] 11: ( load hoist0 crate2 truck0 depot0) [0] 12: ( drop hoist1 crate1 crate3 distributor0) [0] 13: ( unload hoist0 crate2 truck0 depot0) [0] 14: ( drop hoist0 crate2 pallet0 depot0) [0] 15: ( drive truck0 depot0 distributor0) [0] 16: ( drive truck1 depot0 distributor1) [0] 17: ( drive truck0 distributor0 depot0) [0] 18: ( unload hoist2 crate0 truck1 distributor1) [0] 19: ( drop hoist2 crate0 pallet2 distributor1) [0]  time spent: 0,09 seconds parsing             0,27 seconds encoding             1,30 seconds searching             1,65 seconds total time  memory used: 0,90 MBytes for problem representation             0,00 MBytes for searching             0,90 MBytes total </pre> |
| p03                                    | <pre> 00: ( lift hoist0 crate1 pallet0 depot0) [0] 01: ( load hoist0 crate1 truck0 depot0) [0] 02: ( lift hoist2 crate5 crate2 distributor1) [0] 03: ( drive truck0 depot0 distributor1) [0] 04: ( load hoist2 crate5 truck0 distributor1) [0] 05: ( lift hoist1 crate4 crate3 distributor0) [0] 06: ( lift hoist2 crate2 pallet2 distributor1) [0] 07: ( load hoist2 crate2 truck0 distributor1) [0] 08: ( load hoist1 crate4 truck1 distributor0) [0] 09: ( unload hoist2 crate1 truck0 distributor1) [0] </pre>   | <pre> 00: ( drop hoist2 crate0 crate1 distributor1) [0] 01: ( unload hoist1 crate4 truck0 distributor0) [0] 02: ( drive truck0 distributor0 distributor1) [0] 03: ( drive truck1 distributor1 distributor0) [0] 04: ( drive truck1 distributor0 distributor0) [0] 05: ( drive truck0 distributor1 distributor1) [0] 06: ( load hoist1 crate4 truck1 distributor0) [0] 07: ( unload hoist1 crate4 truck1 distributor0) [0] 08: ( drop hoist0 crate3 crate2 depot0) [0] 09: ( drive truck1 distributor0 distributor1) [0] </pre>   |

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|     | <pre> 10: ( drop hoist2 crate1 pallet2 distributor1) [0] 11: ( drive truck0 distributor1 distributor0) [0] 12: ( lift hoist1 crate3 crate0 distributor0) [0] 13: ( load hoist1 crate3 truck0 distributor0) [0] 14: (   drive truck0 distributor0 depot0) [0] 15: (   unload hoist0 crate2 truck0 depot0) [0] 16: ( lift hoist1 crate0 pallet1 distributor0) [0] 17: ( load hoist1 crate0 truck1 distributor0) [0] 18: (unload hoist1 crate4 truck1 distributor0) [0] 19: ( drive truck1 distributor0 distributor1) [0] 20: ( drop hoist0 crate2 pallet0 depot0) [0] 21: (unload hoist2 crate0 truck1 distributor1) [0] 22: ( drop hoist1 crate4 pallet1 distributor0) [0] 23: ( drop hoist2 crate0 crate1 distributor1) [0] 24: (   unload hoist0 crate3 truck0 depot0) [0] 25: (   drive truck0 depot0 distributor1) [0] 26: (   drop hoist0 crate3 crate2 depot0) [0] 27: (unload hoist2 crate5 truck0 distributor1) [0] 28: ( drop hoist2 crate5 crate0 distributor1) [0] </pre> <p>time spent: 0,08 seconds parsing<br/>0,35 seconds encoding<br/>3,71 seconds searching<br/>4,15 seconds total time</p> <p>memory used: 1,59 MBytes for problem representation<br/>2,98 MBytes for searching<br/>4,57 MBytes total</p>  |   |
| p04 | <pre> 00: ( lift hoist2 crate6 crate5 distributor1) [0] 01: ( load hoist2 crate6 truck1 distributor1) [0] 02: ( drive truck1 distributor1 distributor0) [0] 03: ( lift hoist1 crate2 pallet1 distributor0) [0] 04: ( load hoist1 crate2 truck1 distributor0) [0] 05: (unload hoist1 crate6 truck1 distributor0) [0] 06: ( drop hoist1 crate6 pallet1 distributor0) [0] 07: (unload hoist1 crate2 truck1 distributor0) [0] 08: ( drop hoist1 crate2 crate6 distributor0) [0] 09: (   drive truck1 distributor0 depot0) [0] 10: (   lift hoist0 crate7 crate4 depot0) [0] 11: (   load hoist0 crate7 truck1 depot0) [0] 12: (   lift hoist0 crate4 crate1 depot0) [0] 13: (   load hoist0 crate4 truck1 depot0) [0] 14: (   lift hoist0 crate1 crate0 depot0) [0] 15: (   load hoist0 crate1 truck1 depot0) [0] 16: (   lift hoist0 crate0 pallet0 depot0) [0] 17: (   load hoist0 crate0 truck1 depot0) [0] 18: (   unload hoist0 crate7 truck1 depot0) [0] 19: (   drop hoist0 crate7 pallet0 depot0) [0] 20: ( lift hoist2 crate5 crate3 distributor1) [0] 21: ( load hoist2 crate5 truck0 distributor1) [0] 22: ( lift hoist2 crate3 pallet2 distributor1) [0] 23: ( load hoist2 crate3 truck0 distributor1) [0] 24: (   unload hoist0 crate4 truck1 depot0) [0] 25: (   drop hoist0 crate4 crate7 depot0) [0] 26: (   unload hoist0 crate0 truck1 depot0) [0] 27: (   drop hoist0 crate0 crate4 depot0) [0] 28: (unload hoist2 crate5 truck0 distributor1) [0] 29: ( drop hoist2 crate5 pallet2 distributor1) [0] </pre> <p>time spent: 0,09 seconds parsing<br/>0,45 seconds encoding<br/>9,75 seconds searching<br/>10,29 seconds total time</p> <p>memory used: 2,49 MBytes for problem representation<br/>0,00 MBytes for searching<br/>2,49 MBytes total</p> |   |
| p05 | <pre> 00: ( lift hoist0 crate4 crate3 depot0) [0] 01: ( load hoist0 crate4 truck0 depot0) [0] 02: ( lift hoist0 crate3 crate1 depot0) [0] 03: ( load hoist0 crate3 truck0 depot0) [0] 04: ( lift hoist0 crate1 pallet0 depot0) [0] 05: ( load hoist0 crate1 truck0 depot0) [0] 06: (   drive truck0 depot0 distributor0) [0] 07: ( lift hoist1 crate8 crate7 distributor0) [0] </pre>  | <pre> 00: (   load hoist2 crate3 truck1 distributor1) [0] 01: (   lift hoist2 crate5 crate2 distributor1) [0] 02: (   drive truck1 distributor1 distributor0) [0] 03: (   drive truck0 distributor1 distributor0) [0] 04: (   lift hoist1 crate7 crate1 distributor0) [0] 05: (   drive truck0 distributor0 distributor0) [0] 06: (   load hoist2 crate5 truck1 distributor1) [0] 07: (unload hoist2 crate3 truck1 distributor1) [0] </pre> |

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|     | <pre> 08: ( load hoist1 crate8 truck0 distributor0) [0] 09: ( lift hoist1 crate7 crate6 distributor0) [0] 10: ( load hoist1 crate7 truck0 distributor0) [0] 11: ( lift hoist1 crate6 pallet1 distributor0) [0] 12: ( load hoist1 crate6 truck0 distributor0) [0] 13: (unload hoist1 crate1 truck0 distributor0) [0] 14: ( drop hoist1 crate1 pallet1 distributor0) [0] 15: (unload hoist1 crate7 truck0 distributor0) [0] 16: ( drive truck0 distributor0 distributor1) [0] 17: ( lift hoist2 crate9 crate5 distributor1) [0] 18: ( load hoist2 crate9 truck0 distributor1) [0] 19: ( lift hoist2 crate5 crate2 distributor1) [0] 20: ( load hoist2 crate5 truck0 distributor1) [0] 21: ( lift hoist2 crate2 crate0 distributor1) [0] 22: ( load hoist2 crate2 truck0 distributor1) [0] 23: ( lift hoist2 crate0 pallet2 distributor1) [0] 24: ( load hoist2 crate0 truck0 distributor1) [0] 25: (unload hoist2 crate3 truck0 distributor1) [0] 26: ( drive truck0 distributor1 depot0) [0] 27: ( drop hoist2 crate3 pallet2 distributor1) [0] 28: ( unload hoist0 crate9 truck0 depot0) [0] 29: ( drop hoist0 crate9 pallet0 depot0) [0] 30: ( unload hoist0 crate6 truck0 depot0) [0] 31: ( drop hoist0 crate6 crate9 depot0) [0] 32: ( drop hoist1 crate7 crate1 distributor0) [0] 33: ( unload hoist0 crate4 truck0 depot0) [0] 34: ( drop hoist0 crate4 crate6 depot0) [0] 35: ( unload hoist0 crate5 truck0 depot0) [0] 36: ( drop hoist0 crate5 crate4 depot0) [0] 37: ( unload hoist0 crate0 truck0 depot0) [0] 38: ( drop hoist0 crate0 crate5 depot0) [0] 39: ( unload hoist0 crate2 truck0 depot0) [0] 40: ( drive truck0 depot0 distributor1) [0] 41: ( drop hoist0 crate2 crate0 depot0) [0] 42: (unload hoist2 crate8 truck0 distributor1) [0] 43: ( drop hoist2 crate8 crate3 distributor1) [0] </pre> <p>time spent: 0,08 seconds parsing<br/>             0,52 seconds encoding<br/>             272,73 seconds searching<br/>             273,33 seconds total time</p> <p>memory used: 3,61 MBytes for problem representation<br/>             293,38 MBytes for searching<br/>             296,99 MBytes total</p> |   |
|     | <p>no plan found</p> <p>time spent: 0,10 seconds parsing<br/>             0,86 seconds encoding<br/>             0,00 seconds searching<br/>             0,96 seconds total time</p> <p>memory used: 7,33 MBytes for problem representation<br/>             0,00 MBytes for searching<br/>             7,33 MBytes total</p>  | <pre> 00: ( drive truck0 distributor1 depot0) [0] 01: ( unload hoist0 crate6 truck0 depot0) [0] 02: ( load hoist0 crate6 truck0 depot0) [0] 03: ( drive truck1 distributor0 distributor1) [0] 04: ( drive truck0 depot0 distributor1) [0] 05: ( drop hoist1 crate0 crate11 distributor0) [0] 06: ( load hoist2 crate14 truck1 distributor1) [0] 07: ( drive truck0 distributor1 distributor1) [0] 08: (unload hoist2 crate2 truck1 distributor1) [0] 09: ( load hoist2 crate2 truck0 distributor1) [0] 10: ( drive truck0 distributor1 distributor0) [0] 11: ( drive truck1 distributor1 depot0) [0] 12: ( drive truck0 distributor0 depot0) [0] 13: ( unload hoist0 crate13 truck1 depot0) [0] 14: ( lift hoist1 crate0 crate11 distributor0) [0] 15: ( load hoist0 crate13 truck1 depot0) [0] 16: ( drop hoist1 crate0 crate11 distributor0) [0] 17: ( drive truck1 depot0 distributor1) [0] 18: ( drive truck1 distributor1 distributor0) [0] 19: ( lift hoist1 crate0 crate11 distributor0) [0] </pre> <p>time spent: 0,09 seconds parsing<br/>             0,87 seconds encoding<br/>             600,84 seconds searching<br/>             601,80 seconds total time</p> <p>memory used: 7,33 MBytes for problem representation<br/>             0,00 MBytes for searching<br/>             7,33 MBytes total</p> |
| p07 | 00: ( lift hoist2 crate3 crate2 distributor1) [0]  | 00: ( drive truck1 depot0 distributor0) [0]   |

p06

|  |   |
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|  | <pre> 01: ( load hoist2 crate3 truck0 distributor1) [0] 02: ( drive truck0 distributor1 distributor0) [0] 03: ( lift hoist1 crate4 crate0 distributor0) [0] 04: ( load hoist1 crate4 truck0 distributor0) [0] 05: (unload hoist1 crate3 truck0 distributor0) [0] 06: ( drop hoist1 crate3 pallet1 distributor0) [0] 07: ( lift hoist0 crate5 pallet0 depot0) [0] 08: ( load hoist0 crate5 truck1 depot0) [0] 09: ( lift hoist2 crate1 pallet5 distributor1) [0] 10: ( drop hoist2 crate1 crate2 distributor1) [0] 11: ( drive truck0 distributor0 distributor1) [0] 12: ( lift hoist1 crate0 pallet4 distributor0) [0] 13: (unload hoist2 crate4 truck0 distributor1) [0] 14: ( drop hoist2 crate4 pallet5 distributor1) [0] 15: ( lift hoist2 crate1 crate2 distributor1) [0] 16: ( drop hoist2 crate1 crate4 distributor1) [0] 17: ( drive truck1 depot0 distributor1) [0] 18: ( drop hoist1 crate0 pallet3 distributor0) [0] 19: (unload hoist2 crate5 truck1 distributor1) [0] 20: ( drop hoist2 crate5 crate1 distributor1) [0] </pre> <p>time spent: 0,11 seconds parsing<br/>                     0,45 seconds encoding<br/>                     2,63 seconds searching<br/>                     3,18 seconds total time</p> <p>memory used: 1,91 MBytes for problem representation<br/>                     0,00 MBytes for searching<br/>                     1,91 MBytes total</p> <p>time spent: 0,37 seconds parsing<br/>                     0,78 seconds encoding<br/>                     1,13 seconds searching<br/>                     2,28 seconds total time</p> <p>memory used: 1,91 MBytes for problem representation<br/>                     0,94 MBytes for searching<br/>                     2,86 MBytes total</p> |
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### ipc1998/logistics/strips-round1

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| p01 | <p>java.lang.OutOfMemoryError: Java heap space</p>   | <pre> 00: ( unload-truck package2 truck3 city3-2) [0] 01: ( load-airplane package4 plane1 city5-2) [0] 02: ( unload-airplane package4 plane2 city1-2) [0] 03: ( unload-airplane package4 plane1 city3-2) [0] 04: ( fly-airplane plane1 city3-2 city5-2) [0] 05: (drive-truck truck6 city6-2 city6-2 city6) [0] 06: ( unload-airplane package5 plane1 city6-2) [0] 07: ( fly-airplane plane2 city5-2 city2-2) [0] 08: ( fly-airplane plane1 city2-2 city4-2) [0] 09: ( unload-airplane package2 plane2 city3-2) [0] 10: ( load-airplane package2 plane2 city3-2) [0] 11: ( fly-airplane plane2 city3-2 city3-2) [0] 12: ( fly-airplane plane2 city5-2 city3-2) [0] 13: ( unload-airplane package3 plane2 city6-2) [0] 14: ( load-truck package4 truck5 city5-2) [0] 15: ( load-airplane package2 plane2 city5-2) [0] 16: ( load-airplane package6 plane1 city1-2) [0] 17: ( fly-airplane plane1 city6-2 city1-2) [0] 18: ( unload-truck package3 truck6 city6-1) [0] </pre> <p>time spent: 0,26 seconds parsing<br/>                     0,36 seconds encoding<br/>                     16,89 seconds searching<br/>                     17,50 seconds total time</p> <p>memory used: 2,26 MBytes for problem representation<br/>                     0,00 MBytes for searching<br/>                     2,26 MBytes total</p> |
| p02 | <p>no plan found</p> <p>time spent: 0,09 seconds parsing<br/>                     0,74 seconds encoding<br/>                     0,00 seconds searching<br/>                     0,83 seconds total time</p> <p>memory used: 5,75 MBytes for problem</p> | <pre> 00: ( fly-airplane plane3 city6-2 city6-2) [0] 01: ( fly-airplane plane3 city7-2 city2-2) [0] 02: ( fly-airplane plane4 city10-2 city1-2) [0] 03: ( fly-airplane plane3 city1-2 city9-2) [0] 04: (unload-airplane package1 plane2 city1-2) [0] 05: ( unload-truck package3 truck1 city1-1) [0] 06: ( fly-airplane plane2 city9-2 city9-2) [0] 07: ( load-airplane package5 plane2 city1-2) [0] </pre>   |

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|     | <p>representation<br/>0,00 MBytes for searching<br/>5,75 MBytes total</p> <p>08: ( fly-airplane plane2 city5-2 city10-2) [0]<br/>09: ( fly-airplane plane3 city10-2 city9-2) [0]<br/>10: ( fly-airplane plane2 city7-2 city2-2) [0]<br/>11: ( fly-airplane plane4 city9-2 city10-2) [0]<br/>12: ( fly-airplane plane2 city6-2 city8-2) [0]<br/>13: ( fly-airplane plane3 city6-2 city5-2) [0]<br/>14: (unload-airplane package3 plane1 city4-2) [0]<br/><br/>15: ( fly-airplane plane3 city8-2 city5-2) [0]<br/>16: ( fly-airplane plane2 city4-2 city9-2) [0]<br/>17: ( fly-airplane plane2 city7-2 city1-2) [0]<br/>18: ( fly-airplane plane4 city1-2 city7-2) [0]<br/>19: ( fly-airplane plane1 city4-2 city3-2) [0]</p> <p>time spent: 0,08 seconds parsing<br/>0,79 seconds encoding<br/>608,93 seconds searching<br/>609,80 seconds total time</p> <p>memory used: 5,75 MBytes for problem representation<br/>0,00 MBytes for searching<br/>5,75 MBytes total</p> |  |
| p03 | <p>no plan found</p> <p>time spent: 0,11 seconds parsing<br/>2,14 seconds encoding<br/>0,00 seconds searching<br/>2,24 seconds total time</p> <p>memory used: 27,05 MBytes for problem representation<br/>0,00 MBytes for searching<br/>27,05 MBytes total</p>  | <p>00: (drive-truck truck7 city7-1 city7-1 city7) [0]<br/>01: (drive-truck truck1 city1-1 city1-2 city1) [0]<br/>02: (drive-truck truck6 city6-2 city6-2 city6) [0]<br/>03: (drive-truck truck8 city8-2 city8-1 city8) [0]<br/>04: ( fly-airplane plane2 city11-3 city10-3) [0]<br/>05: (drive-truck truck5 city5-1 city5-2 city5) [0]<br/>06: ( fly-airplane plane2 city11-3 city4-3) [0]<br/>07: ( fly-airplane plane1 city11-3 city11-3) [0]<br/>08: ( fly-airplane plane3 city1-3 city4-3) [0]<br/>09: ( fly-airplane plane2 city4-3 city3-3) [0]<br/>10: ( fly-airplane plane2 city4-3 city7-3) [0]<br/>11: ( fly-airplane plane2 city7-3 city7-3) [0]<br/>12: ( fly-airplane plane2 city10-3 city6-3) [0]<br/>13: (drive-truck truck1 city1-1 city1-3 city1) [0]<br/>14: ( load-truck package7 truck1 city1-2) [0]<br/>15: ( unload-truck package7 truck1 city1-3) [0]<br/>16: ( fly-airplane plane2 city11-3 city1-3) [0]<br/>17: ( fly-airplane plane1 city11-3 city3-3) [0]<br/>18: ( fly-airplane plane2 city3-3 city12-3) [0]<br/>19: ( fly-airplane plane2 city4-3 city12-3) [0]</p> <p>time spent: 0,32 seconds parsing<br/>3,46 seconds encoding<br/>629,14 seconds searching<br/>632,92 seconds total time</p> <p>memory used: 27,05 MBytes for problem representation<br/>0,00 MBytes for searching<br/>27,05 MBytes total</p> |
| p04 | <p>no plan found</p> <p>time spent: 0,12 seconds parsing<br/>3,90 seconds encoding<br/>0,00 seconds searching<br/>4,02 seconds total time</p> <p>memory used: 46,59 MBytes for problem representation<br/>0,00 MBytes for searching<br/>46,59 MBytes total</p>  | <p>00: ( fly-airplane plane2 city12-4 city13-4) [0]<br/>01: ( fly-airplane plane1 city3-4 city5-4) [0]<br/>02: ( drive-truck truck3 city7-1 city7-2 city7) [0]<br/>03: ( drive-truck truck7 city9-1 city9-4 city9) [0]<br/>04: ( unload-airplane package7 plane2 city12-4) [0]<br/>05: ( fly-airplane plane1 city3-4 city11-4) [0]<br/>06: ( drive-truck truck18 city8-2 city8-3 city8) [0]<br/>07: ( fly-airplane plane2 city4-4 city5-4) [0]<br/>08: ( fly-airplane plane4 city4-4 city10-4) [0]<br/>09: ( fly-airplane plane2 city12-4 city5-4) [0]<br/>10: ( fly-airplane plane4 city6-4 city5-4) [0]<br/>11: ( fly-airplane plane4 city8-4 city3-4) [0]<br/>12: ( drive-truck truck5 city8-2 city8-2 city8) [0]<br/>13: ( fly-airplane plane3 city6-4 city4-4) [0]<br/>14: ( fly-airplane plane1 city3-4 city7-4) [0]</p>   |

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|     |  | <p>15: (drive-truck truck23 city13-2 city13-2 city13) [0]<br/>     16: ( drive-truck truck6 city9-2 city9-1 city9) [0]<br/>     17: ( fly-airplane plane4 city5-4 city11-4) [0]<br/>     18: ( drive-truck truck17 city7-3 city7-4 city7) [0]<br/>     19: ( fly-airplane plane1 city2-4 city6-4) [0]</p> <p>time spent: 0,09 seconds parsing<br/>     3,81 seconds encoding<br/>     629,00 seconds searching<br/>     632,90 seconds total time</p> <p>memory used: 46,59 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     46,59 MBytes total</p>  |
| p05 |  | <p>no plan found</p> <p>time spent: 0,08 seconds parsing<br/>     0,74 seconds encoding<br/>     0,00 seconds searching<br/>     0,82 seconds total time</p> <p>memory used: 3,90 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     3,90 MBytes total</p> <p>00: ( load-truck package2 truck2 city8-2) [0]<br/>     01: ( fly-airplane plane1 city5-2 city5-2) [0]<br/>     02: ( unload-airplane package2 plane1 city2-2) [0]<br/>     03: ( fly-airplane plane1 city4-2 city6-2) [0]<br/>     04: ( fly-airplane plane1 city1-2 city7-2) [0]<br/>     05: (drive-truck truck2 city8-1 city8-1 city8) [0]<br/>     06: ( fly-airplane plane1 city1-2 city3-2) [0]<br/>     07: ( fly-airplane plane1 city2-2 city3-2) [0]<br/>     08: (drive-truck truck1 city3-2 city3-1 city3) [0]<br/>     09: ( fly-airplane plane1 city4-2 city9-2) [0]<br/>     10: ( fly-airplane plane1 city9-2 city3-2) [0]<br/>     11: ( fly-airplane plane1 city9-2 city7-2) [0]<br/>     12: ( load-truck package3 truck11 city9-2) [0]<br/>     13: ( load-airplane package2 plane1 city3-2) [0]<br/>     14: ( load-airplane package4 plane1 city8-2) [0]<br/>     15: ( load-airplane package4 plane1 city2-2) [0]<br/>     16: ( unload-truck package2 truck1 city3-2) [0]<br/>     17: ( fly-airplane plane1 city5-2 city8-2) [0]<br/>     18: ( load-airplane package3 plane1 city7-2) [0]<br/>     19: ( unload-truck package2 truck1 city3-1) [0]</p> <p>time spent: 0,07 seconds parsing<br/>     0,60 seconds encoding<br/>     28,82 seconds searching<br/>     29,49 seconds total time</p> <p>memory used: 3,90 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     3,90 MBytes total</p> |
| p06 |  | <p>no plan found</p> <p>time spent: 0,12 seconds parsing<br/>     9,68 seconds encoding<br/>     0,00 seconds searching<br/>     9,80 seconds total time</p> <p>memory used: 160,65 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     160,65 MBytes total</p> <p>java.lang.NullPointerException</p>   |
| p07 |  | <p>no plan found</p> <p>time spent: 0,18 seconds parsing<br/>     1,15 seconds encoding<br/>     0,00 seconds searching<br/>     1,33 seconds total time</p> <p>memory used: 13,46 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     13,46 MBytes total</p> <p>00: ( unload-airplane package8 plane2 city8-2) [0]<br/>     01: ( load-airplane package6 plane1 city5-2) [0]<br/>     02: ( fly-airplane plane3 city4-2 city3-2) [0]<br/>     03: ( fly-airplane plane3 city7-2 city8-2) [0]<br/>     04: ( fly-airplane plane3 city9-2 city3-2) [0]<br/>     05: ( fly-airplane plane2 city3-2 city11-2) [0]<br/>     06: ( fly-airplane plane1 city10-2 city9-2) [0]<br/>     07: ( fly-airplane plane4 city6-2 city8-2) [0]<br/>     08: ( fly-airplane plane1 city8-2 city8-2) [0]<br/>     09: (drive-truck truck9 city9-1 city9-1 city9) [0]<br/>     10: (drive-truck truck5 city5-1 city5-2 city5) [0]<br/>     11: ( fly-airplane plane3 city11-2 city2-2) [0]<br/>     12: (unload-airplane package8 plane3 city10-2) [0]</p>  |

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|     |               | <p>13: ( fly-airplane plane2 city2-2 city9-2) [0]<br/>     14: (drive-truck truck7 city7-2 city7-2 city7) [0]<br/>     15: ( load-truck package7 truck5 city5-2) [0]<br/>     16: ( unload-airplane package4 plane1 city2-2)<br/>     [0]<br/>     17: ( load-airplane package6 plane2 city10-2)<br/>     [0]<br/>     18: ( fly-airplane plane6 city3-2 city4-2) [0]<br/>     19: ( load-airplane package6 plane2 city11-2)<br/>     [0]</p> <p>time spent: 0,08 seconds parsing<br/>     1,02 seconds encoding<br/>     609,55 seconds searching<br/>     610,65 seconds total time</p> <p>memory used: 13,46 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     13,46 MBytes total</p>  |
| p08 | no plan found | <p>00: ( fly-airplane plane3 city2-3 city5-3) [0]<br/>     01: ( fly-airplane plane1 city5-3 city9-3) [0]<br/>     02: ( fly-airplane plane3 city5-3 city17-3)<br/>     [0]<br/>     03: ( drive-truck truck5 city5-3 city5-3 city5)<br/>     [0]<br/>     04: (drive-truck truck27 city14-1 city14-3 city14) [0]<br/>     05: ( fly-airplane plane1 city5-3 city2-3) [0]<br/>     06: ( drive-truck truck8 city10-3 city10-2 city10)<br/>     [0]<br/>     07: ( drive-truck truck22 city9-1 city9-1 city9)<br/>     [0]<br/>     08: (drive-truck truck25 city12-2 city12-1 city12) [0]<br/>     09: ( fly-airplane plane3 city5-3 city19-3) [0]<br/>     10: ( drive-truck truck18 city5-1 city5-1 city5)<br/>     [0]<br/>     11: ( fly-airplane plane1 city9-3 city20-3) [0]<br/>     12: ( drive-truck truck11 city5-3 city5-2 city5)<br/>     [0]<br/>     13: ( fly-airplane plane2 city16-3 city20-3) [0]<br/>     14: ( drive-truck truck15 city2-2 city2-2 city2)<br/>     [0]<br/>     15: ( fly-airplane plane1 city9-3 city6-3) [0]<br/>     16: ( drive-truck truck4 city17-2 city17-1 city17)<br/>     [0]<br/>     17: ( load-airplane package21 plane1 city20-3) [0]<br/>     18: ( unload-airplane package21 plane1 city6-3) [0]<br/>     19: ( fly-airplane plane1 city5-3 city12-3) [0]</p> <p>time spent: 0,11 seconds parsing<br/>     12,53 seconds encoding<br/>     1071,71 seconds searching<br/>     1084,36 seconds total time</p> <p>memory used: 261,30 MBytes for problem representation<br/>     0,00 MBytes for searching<br/>     261,30 MBytes total</p> |