

===== Loading in the data =====

===== Setting up the Knowledge Base =====

KB: # of facts 42 # of rules 27

fact: (isa cube block)
fact: (isa pyramid block)
fact: (isa sphere block)
fact: (isa box container)
fact: (inst bigbox box)
fact: (size bigbox big)
fact: (color bigbox red)
fact: (inst littlebox box)
fact: (size littlebox small)
fact: (color littlebox blue)
fact: (inst pyramid1 pyramid)
fact: (size pyramid1 small)
fact: (color pyramid1 blue)
fact: (inst pyramid2 pyramid)
fact: (size pyramid2 small)
fact: (color pyramid2 green)
fact: (inst pyramid3 pyramid)
fact: (size pyramid3 big)
fact: (color pyramid3 red)
fact: (inst pyramid4 pyramid)
fact: (size pyramid4 big)
fact: (color pyramid4 red)
fact: (inst cube1 cube)
fact: (inst cube2 cube)
fact: (inst cube3 cube)
fact: (inst cube4 cube)
fact: (inst sphere1 sphere)
fact: (inst bigbox container)
fact: (inst littlebox container)
fact: (inst pyramid1 block)
fact: (inst pyramid2 block)
fact: (inst pyramid3 block)
fact: (inst pyramid4 block)
fact: (inst cube1 block)
fact: (inst cube2 block)
fact: (inst cube3 block)
fact: (inst cube4 block)
fact: (inst sphere1 block)
fact: (flat cube1)

fact: (flat cube2)
 fact: (flat cube3)
 fact: (flat cube4)
 Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)
 Rule 1: When <(isa box ?z)> Assert (inst bigbox ?z)
 Rule 2: When <(isa container ?z)> Assert (inst bigbox ?z)
 Rule 3: When <(isa box ?z)> Assert (inst littlebox ?z)
 Rule 4: When <(isa container ?z)> Assert (inst littlebox ?z)
 Rule 5: When <(isa pyramid ?z)> Assert (inst pyramid1 ?z)
 Rule 6: When <(isa block ?z)> Assert (inst pyramid1 ?z)
 Rule 7: When <(isa pyramid ?z)> Assert (inst pyramid2 ?z)
 Rule 8: When <(isa block ?z)> Assert (inst pyramid2 ?z)
 Rule 9: When <(isa pyramid ?z)> Assert (inst pyramid3 ?z)
 Rule 10: When <(isa block ?z)> Assert (inst pyramid3 ?z)
 Rule 11: When <(isa pyramid ?z)> Assert (inst pyramid4 ?z)
 Rule 12: When <(isa block ?z)> Assert (inst pyramid4 ?z)
 Rule 13: When <(isa cube ?z)> Assert (inst cube1 ?z)
 Rule 14: When <(isa block ?z)> Assert (inst cube1 ?z)
 Rule 15: When <(isa cube ?z)> Assert (inst cube2 ?z)
 Rule 16: When <(isa block ?z)> Assert (inst cube2 ?z)
 Rule 17: When <(isa cube ?z)> Assert (inst cube3 ?z)
 Rule 18: When <(isa block ?z)> Assert (inst cube3 ?z)
 Rule 19: When <(isa cube ?z)> Assert (inst cube4 ?z)
 Rule 20: When <(isa block ?z)> Assert (inst cube4 ?z)
 Rule 21: When <(isa sphere ?z)> Assert (inst sphere1 ?z)
 Rule 22: When <(isa block ?z)> Assert (inst sphere1 ?z)
 Rule 34: When <(inst ?x cube)> Assert (flat ?x)
 Rule 35: When <(on ?x ?y) (bigger ?x ?y)> Assert (covered ?y)
 Rule 36: When <(married ?x ?y) (love ?x ?y)> Assert (happy ?x)
 Rule 37: When <(married ?x ?y) (love ?x ?y)> Assert (happy ?y)

===== Testing KB_Assert =====

fact: (isa cube block)
 fact: (isa pyramid block)
 fact: (isa sphere block)
 fact: (isa box container)
 fact: (inst bigbox box)
 fact: (size bigbox big)
 fact: (color bigbox red)
 fact: (inst littlebox box)
 fact: (size littlebox small)
 fact: (color littlebox blue)
 fact: (inst pyramid1 pyramid)

fact: (size pyramid1 small)
fact: (color pyramid1 blue)
fact: (inst pyramid2 pyramid)
fact: (size pyramid2 small)
fact: (color pyramid2 green)
fact: (inst pyramid3 pyramid)
fact: (size pyramid3 big)
fact: (color pyramid3 red)
fact: (inst pyramid4 pyramid)
fact: (size pyramid4 big)
fact: (color pyramid4 red)
fact: (inst cube1 cube)
fact: (inst cube2 cube)
fact: (inst cube3 cube)
fact: (inst cube4 cube)
fact: (inst sphere1 sphere)
fact: (inst bigbox container)
fact: (inst littlebox container)
fact: (inst pyramid1 block)
fact: (inst pyramid2 block)
fact: (inst pyramid3 block)
fact: (inst pyramid4 block)
fact: (inst cube1 block)
fact: (inst cube2 block)
fact: (inst cube3 block)
fact: (inst cube4 block)
fact: (inst sphere1 block)
fact: (flat cube1)
fact: (flat cube2)
fact: (flat cube3)
fact: (flat cube4)
fact: (contrasting bigbox pyramid2)
fact: (contrasting pyramid3 pyramid2)
fact: (contrasting pyramid4 pyramid2)
fact: (size pyramid3 small)
fact: (color pyramid3 green)
fact: (contrasting bigbox pyramid3)
fact: (contrasting pyramid3 pyramid3)
fact: (contrasting pyramid4 pyramid3)

===== Testing KB_ask =====

Asking : ['inst', '?x', 'box']

Asking (inst ?x box)

This is true: (inst bigbox box)
Asking (inst ?x box)
This is true: (inst littlebox box)
Asking (inst ?x box)
This is true: (inst bigbox box)
Asking (inst ?x box)
This is true: (inst littlebox box)
<logic.Statement object at 0x103f74050> <logic.Statement object at 0x103f74110>

Asking : ['size', '?x', 'big']
Asking (size ?x big)
This is true: (size bigbox big)
Asking (size ?x big)
This is true: (size pyramid3 big)
Asking (size ?x big)
This is true: (size pyramid4 big)
Asking (size ?x big)
This is true: (size bigbox big)
Asking (size ?x big)
This is true: (size pyramid3 big)
Asking (size ?x big)
This is true: (size pyramid4 big)
<logic.Statement object at 0x103f67fd0> <logic.Statement object at 0x103f74090>
<logic.Statement object at 0x103f74190>

Asking : ['color', '?x', 'red']
Asking (color ?x red)
This is true: (color bigbox red)
Asking (color ?x red)
This is true: (color pyramid3 red)
Asking (color ?x red)
This is true: (color pyramid4 red)
Asking (color ?x red)
This is true: (color bigbox red)
Asking (color ?x red)
This is true: (color pyramid3 red)
Asking (color ?x red)
This is true: (color pyramid4 red)
<logic.Statement object at 0x103f74050> <logic.Statement object at 0x103f74150>
<logic.Statement object at 0x103f74090>

Asking : ['inst', 'littlebox', '?x']
Asking (inst littlebox ?x)
This is true: (inst littlebox box)

Asking (inst littlebox ?x)
This is true: (inst littlebox container)
Asking (inst littlebox ?x)
This is true: (inst littlebox box)
Asking (inst littlebox ?x)
This is true: (inst littlebox container)
<logic.Statement object at 0x103f67c90> <logic.Statement object at 0x103f74050>

Asking : ['size', 'littlebox', '?x']
Asking (size littlebox ?x)
This is true: (size littlebox small)
Asking (size littlebox ?x)
This is true: (size littlebox small)
<logic.Statement object at 0x103f74110>

Asking : ['color', 'littlebox', '?x']
Asking (color littlebox ?x)
This is true: (color littlebox blue)
Asking (color littlebox ?x)
This is true: (color littlebox blue)
<logic.Statement object at 0x103f67fd0>

Asking : ['inst', '?x', 'pyramid']
Asking (inst ?x pyramid)
This is true: (inst pyramid1 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid2 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid3 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid4 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid1 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid2 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid3 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid4 pyramid)
<logic.Statement object at 0x103f74150> <logic.Statement object at 0x103f74210>
<logic.Statement object at 0x103f74250> <logic.Statement object at 0x103f74290>

===== Testing KB_ask and instantiate =====

Asking : ['inst', '?x', 'box']
Asking (inst ?x box)
This is true: (inst bigbox box)
Asking (inst ?x box)
This is true: (inst littlebox box)
Found:

Asking : ['size', '?x', 'big']
Asking (size ?x big)
This is true: (size bigbox big)
Asking (size ?x big)
This is true: (size pyramid3 big)
Asking (size ?x big)
This is true: (size pyramid4 big)
Found:

Asking : ['color', '?x', 'red']
Asking (color ?x red)
This is true: (color bigbox red)
Asking (color ?x red)
This is true: (color pyramid3 red)
Asking (color ?x red)
This is true: (color pyramid4 red)
Found:

Asking : ['inst', 'littlebox', '?x']
Asking (inst littlebox ?x)
This is true: (inst littlebox box)
Asking (inst littlebox ?x)
This is true: (inst littlebox container)
Found:

Asking : ['size', 'littlebox', '?x']
Asking (size littlebox ?x)
This is true: (size littlebox small)
Found:

Asking : ['color', 'littlebox', '?x']
Asking (color littlebox ?x)
This is true: (color littlebox blue)
Found:

Asking : ['inst', '?x', 'pyramid']
Asking (inst ?x pyramid)

This is true: (inst pyramid1 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid2 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid3 pyramid)
Asking (inst ?x pyramid)
This is true: (inst pyramid4 pyramid)
Found:

===== Testing retract =====

<logic.Statement object at 0x103f5b8d0>
delete the fact: (color bigbox red)
Relevant rules(support): Rule 52: When <(color ?y green)> Assert (contrasting bigbox ?y)
delete the rule: Rule 52: When <(color ?y green)> Assert (contrasting bigbox ?y)
Relevant facts(support): (contrasting bigbox pyramid2)
delete the fact: (contrasting bigbox pyramid2)
Relevant facts(support): (contrasting bigbox pyramid3)
delete the fact: (contrasting bigbox pyramid3)
delete the fact: (size bigbox big)
Relevant rules(support): Rule 40: When <(inst bigbox box)> Assert (fits littlebox bigbox)
delete the rule: Rule 40: When <(inst bigbox box)> Assert (fits littlebox bigbox)
Relevant rules(support): Rule 44: When <(inst bigbox box)> Assert (fits pyramid1 bigbox)
delete the rule: Rule 44: When <(inst bigbox box)> Assert (fits pyramid1 bigbox)
Relevant rules(support): Rule 48: When <(inst bigbox box)> Assert (fits pyramid2 bigbox)
delete the rule: Rule 48: When <(inst bigbox box)> Assert (fits pyramid2 bigbox)
Relevant rules(support): Rule 56: When <(inst bigbox box)> Assert (fits pyramid3 bigbox)
delete the rule: Rule 56: When <(inst bigbox box)> Assert (fits pyramid3 bigbox)
<logic.Statement object at 0x103f5b8d0>

===== Asserting what we just retracted =====

fact: (isa cube block)
fact: (isa pyramid block)
fact: (isa sphere block)
fact: (isa box container)
fact: (inst bigbox box)
fact: (inst littlebox box)
fact: (size littlebox small)
fact: (color littlebox blue)
fact: (inst pyramid1 pyramid)
fact: (size pyramid1 small)
fact: (color pyramid1 blue)
fact: (inst pyramid2 pyramid)

fact: (size pyramid2 small)
fact: (color pyramid2 green)
fact: (inst pyramid3 pyramid)
fact: (size pyramid3 big)
fact: (color pyramid3 red)
fact: (inst pyramid4 pyramid)
fact: (size pyramid4 big)
fact: (color pyramid4 red)
fact: (inst cube1 cube)
fact: (inst cube2 cube)
fact: (inst cube3 cube)
fact: (inst cube4 cube)
fact: (inst sphere1 sphere)
fact: (inst bigbox container)
fact: (inst littlebox container)
fact: (inst pyramid1 block)
fact: (inst pyramid2 block)
fact: (inst pyramid3 block)
fact: (inst pyramid4 block)
fact: (inst cube1 block)
fact: (inst cube2 block)
fact: (inst cube3 block)
fact: (inst cube4 block)
fact: (inst sphere1 block)
fact: (flat cube1)
fact: (flat cube2)
fact: (flat cube3)
fact: (flat cube4)
fact: (contrasting pyramid3 pyramid2)
fact: (contrasting pyramid4 pyramid2)
fact: (size pyramid3 small)
fact: (color pyramid3 green)
fact: (contrasting pyramid3 pyramid3)
fact: (contrasting pyramid4 pyramid3)
fact: (color bigbox red)
fact: (contrasting bigbox pyramid2)
fact: (contrasting bigbox pyramid3)
fact: (size bigbox big)
Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)
Rule 1: When <(isa box ?z)> Assert (inst bigbox ?z)
Rule 2: When <(isa container ?z)> Assert (inst bigbox ?z)
Rule 3: When <(isa box ?z)> Assert (inst littlebox ?z)
Rule 4: When <(isa container ?z)> Assert (inst littlebox ?z)
Rule 5: When <(isa pyramid ?z)> Assert (inst pyramid1 ?z)

Rule 6: When <(isa block ?z)> Assert (inst pyramid1 ?z)
Rule 7: When <(isa pyramid ?z)> Assert (inst pyramid2 ?z)
Rule 8: When <(isa block ?z)> Assert (inst pyramid2 ?z)
Rule 9: When <(isa pyramid ?z)> Assert (inst pyramid3 ?z)
Rule 10: When <(isa block ?z)> Assert (inst pyramid3 ?z)
Rule 11: When <(isa pyramid ?z)> Assert (inst pyramid4 ?z)
Rule 12: When <(isa block ?z)> Assert (inst pyramid4 ?z)
Rule 13: When <(isa cube ?z)> Assert (inst cube1 ?z)
Rule 14: When <(isa block ?z)> Assert (inst cube1 ?z)
Rule 15: When <(isa cube ?z)> Assert (inst cube2 ?z)
Rule 16: When <(isa block ?z)> Assert (inst cube2 ?z)
Rule 17: When <(isa cube ?z)> Assert (inst cube3 ?z)
Rule 18: When <(isa block ?z)> Assert (inst cube3 ?z)
Rule 19: When <(isa cube ?z)> Assert (inst cube4 ?z)
Rule 20: When <(isa block ?z)> Assert (inst cube4 ?z)
Rule 21: When <(isa sphere ?z)> Assert (inst sphere1 ?z)
Rule 22: When <(isa block ?z)> Assert (inst sphere1 ?z)
Rule 34: When <(inst ?x cube)> Assert (flat ?x)
Rule 35: When <(on ?x ?y) (bigger ?x ?y)> Assert (covered ?y)
Rule 36: When <(married ?x ?y) (love ?x ?y)> Assert (happy ?x)
Rule 37: When <(married ?x ?y) (love ?x ?y)> Assert (happy ?y)
Rule 38: When <(size ?x small) (size ?y big) (inst ?y box)> Assert (fits ?x ?y)
Rule 39: When <(size ?y big) (inst ?y box)> Assert (fits littlebox ?y)
Rule 41: When <(inst pyramid3 box)> Assert (fits littlebox pyramid3)
Rule 42: When <(inst pyramid4 box)> Assert (fits littlebox pyramid4)
Rule 43: When <(size ?y big) (inst ?y box)> Assert (fits pyramid1 ?y)
Rule 45: When <(inst pyramid3 box)> Assert (fits pyramid1 pyramid3)
Rule 46: When <(inst pyramid4 box)> Assert (fits pyramid1 pyramid4)
Rule 47: When <(size ?y big) (inst ?y box)> Assert (fits pyramid2 ?y)
Rule 49: When <(inst pyramid3 box)> Assert (fits pyramid2 pyramid3)
Rule 50: When <(inst pyramid4 box)> Assert (fits pyramid2 pyramid4)
Rule 51: When <(color ?x red) (color ?y green)> Assert (contrasting ?x ?y)
Rule 53: When <(color ?y green)> Assert (contrasting pyramid3 ?y)
Rule 54: When <(color ?y green)> Assert (contrasting pyramid4 ?y)
Rule 55: When <(size ?y big) (inst ?y box)> Assert (fits pyramid3 ?y)
Rule 57: When <(inst pyramid3 box)> Assert (fits pyramid3 pyramid3)
Rule 58: When <(inst pyramid4 box)> Assert (fits pyramid3 pyramid4)
Rule 59: When <(color ?y green)> Assert (contrasting bigbox ?y)
Rule 60: When <(inst bigbox box)> Assert (fits littlebox bigbox)
Rule 61: When <(inst bigbox box)> Assert (fits pyramid1 bigbox)
Rule 62: When <(inst bigbox box)> Assert (fits pyramid2 bigbox)
Rule 63: When <(inst bigbox box)> Assert (fits pyramid3 bigbox)

===== Testing against Why =====

fact: (isa cube block)

This fact is true and it is supported by:

['(isa cube block)']

asserted!

fact: (isa pyramid block)

This fact is true and it is supported by:

['(isa pyramid block)']

asserted!

fact: (isa sphere block)

This fact is true and it is supported by:

['(isa sphere block)']

asserted!

fact: (isa box container)

This fact is true and it is supported by:

['(isa box container)']

asserted!

fact: (inst bigbox box)

This fact is true and it is supported by:

['(inst bigbox box)']

asserted!

fact: (inst littlebox box)

This fact is true and it is supported by:

['(inst littlebox box)']

asserted!

fact: (size littlebox small)

This fact is true and it is supported by:

['(size littlebox small)']

asserted!

fact: (color littlebox blue)

This fact is true and it is supported by:

['(color littlebox blue)']

asserted!

fact: (inst pyramid1 pyramid)

This fact is true and it is supported by:

['(inst pyramid1 pyramid)']

asserted!

fact: (size pyramid1 small)

This fact is true and it is supported by:

['(size pyramid1 small)']

asserted!

fact: (color pyramid1 blue)

This fact is true and it is supported by:

['(color pyramid1 blue)']

asserted!

fact: (inst pyramid2 pyramid)

This fact is true and it is supported by:

['(inst pyramid2 pyramid)']

asserted!

fact: (size pyramid2 small)

This fact is true and it is supported by:

['(size pyramid2 small)']

asserted!

fact: (color pyramid2 green)

This fact is true and it is supported by:

['(color pyramid2 green)']

asserted!

fact: (inst pyramid3 pyramid)

This fact is true and it is supported by:

['(inst pyramid3 pyramid)']

asserted!

fact: (size pyramid3 big)

This fact is true and it is supported by:

['(size pyramid3 big)']

asserted!

fact: (color pyramid3 red)

This fact is true and it is supported by:

['(color pyramid3 red)']

asserted!

fact: (inst pyramid4 pyramid)

This fact is true and it is supported by:

['(inst pyramid4 pyramid)']

asserted!

fact: (size pyramid4 big)

This fact is true and it is supported by:

['(size pyramid4 big)']

asserted!

fact: (color pyramid4 red)

This fact is true and it is supported by:

['(color pyramid4 red)']

asserted!

fact: (inst cube1 cube)

This fact is true and it is supported by:

['(inst cube1 cube)']

asserted!

fact: (inst cube2 cube)

This fact is true and it is supported by:

['(inst cube2 cube)']

asserted!

fact: (inst cube3 cube)

This fact is true and it is supported by:

['(inst cube3 cube)']

asserted!

fact: (inst cube4 cube)

This fact is true and it is supported by:

['(inst cube4 cube)']

asserted!

fact: (inst sphere1 sphere)

This fact is true and it is supported by:

['(inst sphere1 sphere)']

asserted!

fact: (inst bigbox container)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst bigbox box)', '(isa box container)']

asserted!

fact: (inst littlebox container)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst littlebox box)', '(isa box container)']

asserted!

fact: (inst pyramid1 block)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst pyramid1 pyramid)', '(isa pyramid block)']

asserted!

fact: (inst pyramid2 block)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst pyramid2 pyramid)', '(isa pyramid block)']

asserted!

fact: (inst pyramid3 block)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst pyramid3 pyramid)', '(isa pyramid block)']

asserted!

fact: (inst pyramid4 block)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst pyramid4 pyramid)', '(isa pyramid block)']

asserted!

fact: (inst cube1 block)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst cube1 cube)', '(isa cube block)']

asserted!

fact: (inst cube2 block)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst cube2 cube)', '(isa cube block)']

asserted!

fact: (inst cube3 block)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst cube3 cube)', '(isa cube block)']
asserted!

fact: (inst cube4 block)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst cube4 cube)', '(isa cube block)']
asserted!

fact: (inst sphere1 block)

This fact is true and it is supported by:

['Rule 0: When <(inst ?x ?y) (isa ?y ?z)> Assert (inst ?x ?z)', '(inst sphere1 sphere)', '(isa sphere block)']
asserted!

fact: (flat cube1)

This fact is true and it is supported by:

['Rule 34: When <(inst ?x cube)> Assert (flat ?x)', '(inst cube1 cube)']
asserted!

fact: (flat cube2)

This fact is true and it is supported by:

['Rule 34: When <(inst ?x cube)> Assert (flat ?x)', '(inst cube2 cube)']
asserted!

fact: (flat cube3)

This fact is true and it is supported by:

['Rule 34: When <(inst ?x cube)> Assert (flat ?x)', '(inst cube3 cube)']

asserted!

fact: (flat cube4)

This fact is true and it is supported by:

['Rule 34: When <(inst ?x cube)> Assert (flat ?x)', '(inst cube4 cube)']

asserted!

fact: (contrasting pyramid3 pyramid2)

This fact is true and it is supported by:

['Rule 51: When <(color ?x red) (color ?y green)> Assert (contrasting ?x ?y)', '(color pyramid3 red)', '(color pyramid2 green)']

asserted!

fact: (contrasting pyramid4 pyramid2)

This fact is true and it is supported by:

['Rule 51: When <(color ?x red) (color ?y green)> Assert (contrasting ?x ?y)', '(color pyramid4 red)', '(color pyramid2 green)']

asserted!

fact: (size pyramid3 small)

This fact is true and it is supported by:

['(size pyramid3 small)']

asserted!

fact: (color pyramid3 green)

This fact is true and it is supported by:

['(color pyramid3 green)']

asserted!

fact: (contrasting pyramid3 pyramid3)

This fact is true and it is supported by:

['Rule 51: When <(color ?x red) (color ?y green)> Assert (contrasting ?x ?y)', '(color pyramid3 red)', '(color pyramid3 green)']

asserted!

fact: (contrasting pyramid4 pyramid3)

This fact is true and it is supported by:

['Rule 51: When <(color ?x red) (color ?y green)> Assert (contrasting ?x ?y)', '(color pyramid4 red)', '(color pyramid3 green)']

asserted!

fact: (color bigbox red)

This fact is true and it is supported by:

['(color bigbox red)']

asserted!

fact: (contrasting bigbox pyramid2)

This fact is true and it is supported by:

['Rule 51: When <(color ?x red) (color ?y green)> Assert (contrasting ?x ?y)', 'Rule 51: When <(color ?x red) (color ?y green)> Assert (contrasting ?x ?y)', '(color bigbox red)', '(color pyramid2 green)', '(color pyramid2 green)']

asserted!

fact: (contrasting bigbox pyramid3)

This fact is true and it is supported by:

['Rule 51: When <(color ?x red) (color ?y green)> Assert (contrasting ?x ?y)', 'Rule 51: When <(color ?x red) (color ?y green)> Assert (contrasting ?x ?y)', '(color bigbox red)', '(color pyramid3 green)', '(color pyramid3 green)']

asserted!

fact: (size bigbox big)

This fact is true and it is supported by:

['(size bigbox big)']

asserted!

===== Testing against Ask PPlus =====

Asking about: [['color', '?y', 'red'], ['color', '?x', 'green']]

Found 0 sets of bindings

No matching solutions

Asking about: [['color', '?y', '?x'], ['inst', '?y', 'box'], ['size', '?y', '?z']]

Found 2 sets of bindings

This is True:

(color ?y blue)

(inst ?y box)

(size ?y ?z)

This is True:

(color ?y red)

(inst ?y box)

(size ?y ?z)