

a b c d e f g h

a b c d e f g h

a

b

d

a b c d g h e f

b a d c f h e g

d b c a e f g h

b

c

a

d

a b c d h g f e

a c b d g h e f

b a d c h f g e

b d a c f h e g

CL: {(h, e), (g, f)}

AUT: {(c, b), (g, h), (e, f)}

CMP = 1

CMP = 1

Node Ignored, less desirable invariant

Node Ignored, less desirable invariant

d b c a f e h g

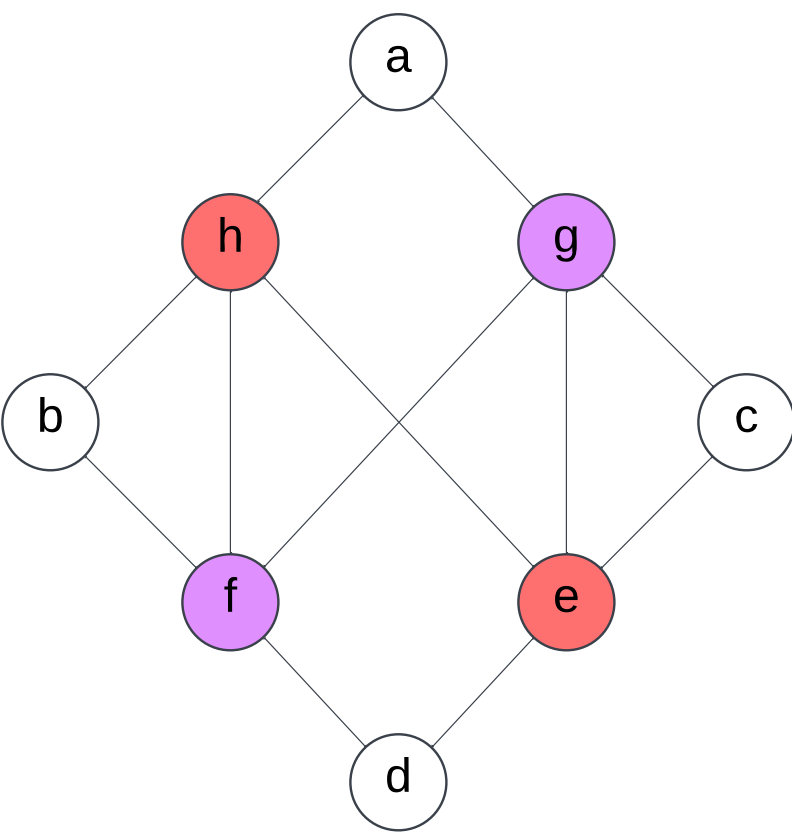
AUT: {(d, a), (f, h), (e, g)}

$\theta = \{(a, d), (b, c), (e, f, g, h)\}$
mcr(θ) = {a, b, e}

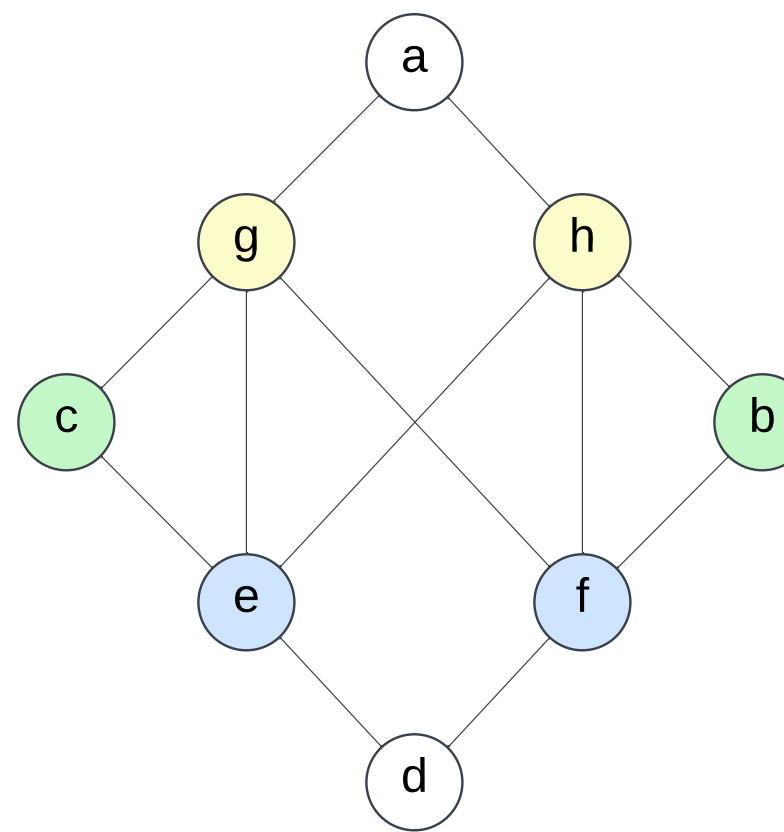
PRUNED

d c b a e f g h

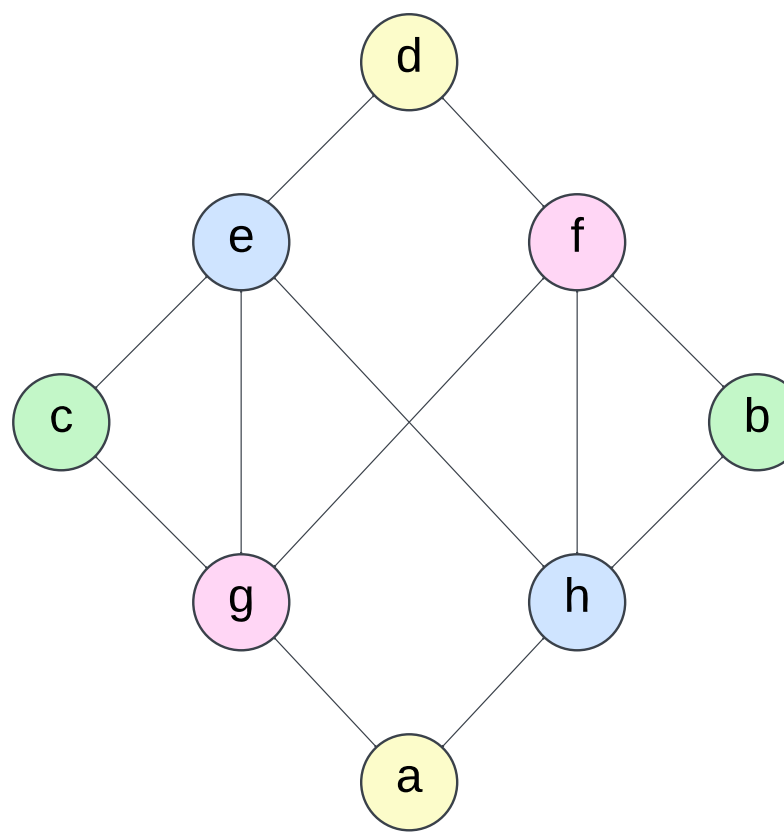
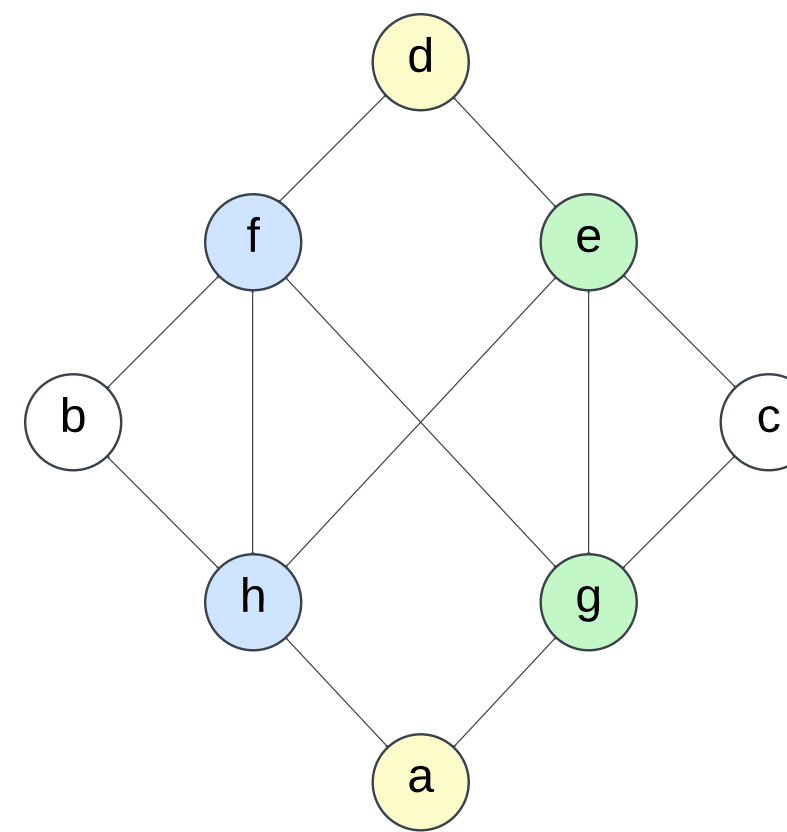
**automorphism {(a,d),(b,c),(e,h),(f,g)}



$\theta = \{(a), (b), (c), (d), (e), (f), (g), (h)\}$
mcr(θ) = {a, b, c, d, e, f, g, h}



$\theta = \{(a), (b, c), (d), (e, f), (g, h)\}$
mcr(θ) = {a, b, d, e, g}



```
P [] tc 0, [a, b, c, d] W [a, b, c, d]
C [a] partion: [[a], [b, c], [d], [g, h], [e, f]] cmp: 0
P [a] tc 1, [b, c] W [b, c]
C [a, b] partion: [[a], [b], [c], [d], [h], [g], [f], [e]] cmp: -1
P [a, b] LEAF
B [a, b] to: PARENT
R [a] MCR: [a, b, c, d, e, f, g, h] old W: [c] W: [c]
P [a] tc 1, [b, c] W [c]
C [a, c] partion: [[a], [c], [b], [d], [g], [h], [e], [f]] cmp: 0
P [a, c] LEAF
B [a, c] to: [a]
R [a] MCR: [a, b, d, e, g] old W: [] W: []
P [a] tc 1, [b, c] W []
B [a] to: PARENT
R [] MCR: [a, b, d, e, g] old W: [b, c, d] W: [b, d]
P [] tc 0, [a, b, c, d] W [b, d]
C [b] partion: [[b], [a, d], [c], [f, h], [e, g]] cmp: 0
P [b] tc 1, [a, d] W [a, d]
C [b, a] partion: [[b], [a], [d], [c], [h], [f], [g], [e]] cmp: 1
P [b] tc 1, [a, d] W [d]
C [b, d] partion: [[b], [d], [a], [c], [f], [h], [e], [g]] cmp: 1
P [b] tc 1, [a, d] W []
B [b] to: PARENT
R [] MCR: [a, b, d, e, g] old W: [d] W: [d]
P [] tc 0, [a, b, c, d] W [d]
C [d] partion: [[d], [b, c], [a], [e, f], [g, h]] cmp: 0
P [d] tc 1, [b, c] W [b, c]
C [d, b] partion: [[d], [b], [c], [a], [f], [e], [h], [g]] cmp: 0
P [d, b] LEAF
B [d, b] to: []
R [] MCR: [a, b, e] old W: [] W: []
P [] tc 0, [a, b, c, d] W []
B [] to: PARENT
```

Canonical Label: Path: [a, b] Permutation: [[h, e], [g, f]]
 Automorphism: Path: [a, c] Auto Generator: [[c, b], [g, h], [e, f]]
 Automorphism: Path: [d, b] Auto Generator: [[d, a], [f, h], [e, g]]
 Number of Nodes in Tree: 9 Total Processing Steps: 14