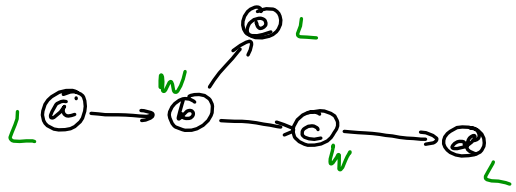
Consider small example



w → w move that should not be done "bad move"

badmove(X,Y) :- win(X), move(X,Y), win(Y).

S.6/8 lose(X) :- pos(X), not win(X).

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Back to the big win-move game: WFS

$I_0 = \emptyset$

P: P + rules for badmove(x,y) + lose(X)

underestimate of true atoms

$I_1 = T_{P_{I_0}}^{\omega}(\emptyset)$

$P_{I_0} = \{ \ldots \}$

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$P_g = \{$ % win(X) :- move(X,Y), not win(Y).
ground instances only when move(x,y) is true

win(a) :- move(a,b), ¬win(b).
win(a) :- move(a,f), ¬win(f).
win(b) :- move(b,c), ¬win(c).
win(b) :- move(b,g), ¬win(g).
win(b) :- move(b,t), ¬win(t).
win(c) :- move(c,d), ¬win(d).
win(c) :- move(c,l), ¬win(l).
win(d) :- move(d,e), ¬win(e).
win(e) :- move(e,a), ¬win(a).
win(g) :- move(g,i), ¬win(i).
win(g) :- move(g,h), ¬win(h).
win(h) :- move(h,m), ¬win(m).
win(i) :- move(i,j), ¬win(j).
win(l) :- move(l,d), ¬win(d).
win(m) :- move(m,h), ¬win(h).

badmove(a,b) :- win(a), move(a,b), win(b).
⋮
lose(a) :- pos(a), ¬win(a).
lose(b) :- ¬win(b).
lose(c) :- ¬win(c).
lose(d) :- ¬win(d).
lose(e) :- ¬win(e).
lose(f) :- ¬win(f).
lose(g) :- ¬win(g).
lose(h) :- ¬win(h).
lose(i) :- ¬win(i).
lose(l) :- ¬win(l).
lose(m) :- ¬win(m).
lose(t) :- ¬win(t).
lose(n) :- ¬win(n). $\}$

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$P_{I_0} = \{$ % win(X) :- move(X,Y), not win(Y).
ground instances only when move(x,y) is true

win(a) :- move(a,b), ¬win(b).
win(a) :- move(a,f), ¬win(f).
win(b) :- move(b,c), ¬win(c).
win(b) :- move(b,g), ¬win(g).
win(b) :- move(b,t), ¬win(t).
win(c) :- move(c,d), ¬win(d).
win(c) :- move(c,l), ¬win(l).
win(d) :- move(d,e), ¬win(e).
win(e) :- move(e,a), ¬win(a).
win(g) :- move(g,i), ¬win(i).
win(g) :- move(g,h), ¬win(h).
win(h) :- move(h,m), ¬win(m).
win(i) :- move(i,j), ¬win(j).
win(l) :- move(l,d), ¬win(d).
win(m) :- move(m,h), ¬win(h).

badmove(a,b) :- win(a), move(a,b), win(b).
⋮
lose(a) :- pos(a), ¬win(a).
lose(b) :- ¬win(b).
lose(c) :- ¬win(c).
lose(d) :- ¬win(d).
lose(e) :- ¬win(e).
lose(f) :- ¬win(f).
lose(g) :- ¬win(g).
lose(h) :- ¬win(h).
lose(i) :- ¬win(i).
lose(l) :- ¬win(l).
lose(m) :- ¬win(m).
lose(t) :- ¬win(t).
lose(n) :- ¬win(n). $\}$

$T^1_{P_{I_0}}(\emptyset) = \{$ win(a), win(b), win(c), win(d), win(e),
win(g), win(h), win(i), win(l), win(m),
% note: not win(f), win(j), win(t), win(n) !
% bad move-nr.6 : doesn't nothing
lose(a), lose(b), ..., lose(n) % all positions $\}$

$T^2_{P_{I_0}}(\emptyset) = T_{P_{I_0}}(\downarrow) = \{$ win(a), win(b), ... as above)
badmove(a,b), badmove(b,c), badmove(c,d), ...
lose(a), lose(b), ... alle positions $\}$

$T^3_{P_{I_0}}(\emptyset) = T_{P_{I_0}}(\downarrow) = \downarrow$
no change $\Rightarrow = T^{(\omega)}_{P_{I_0}}(\emptyset) = I_1$

$\Rightarrow$ overestimate of true atoms
f, j, k, n $\notin$ win

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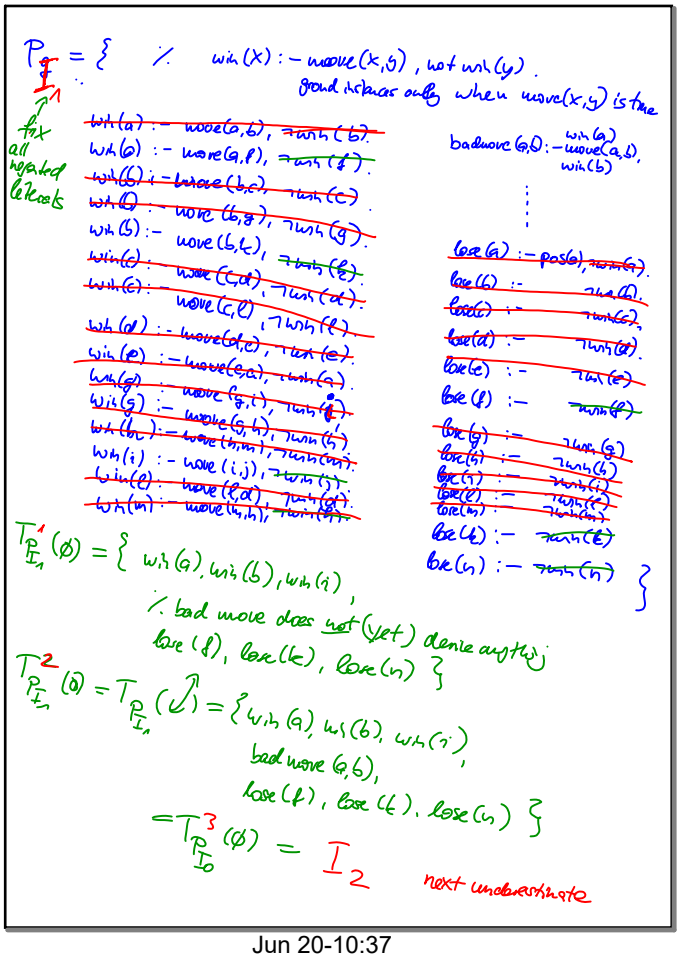
win(X) :- move(X,Y), not win(Y).
ground instances only when move(x,y) is true
badmove(G,D) :- win(G), move(G,D), win(D).
lose(G) :- pos(G), not win(G).
for all negated blocks
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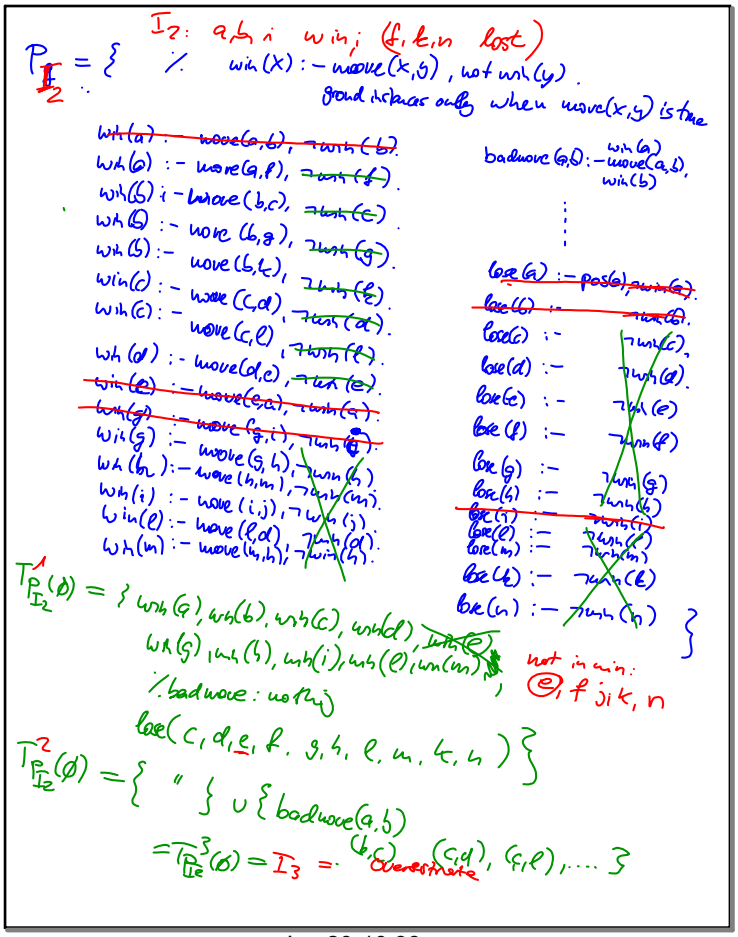
win(X) :- move(X,Y), not win(Y).
ground instances only when move(x,y) is true
badmove(G,D) :- win(G), move(G,D), win(D).
lose(G) :- pos(G), not win(G).
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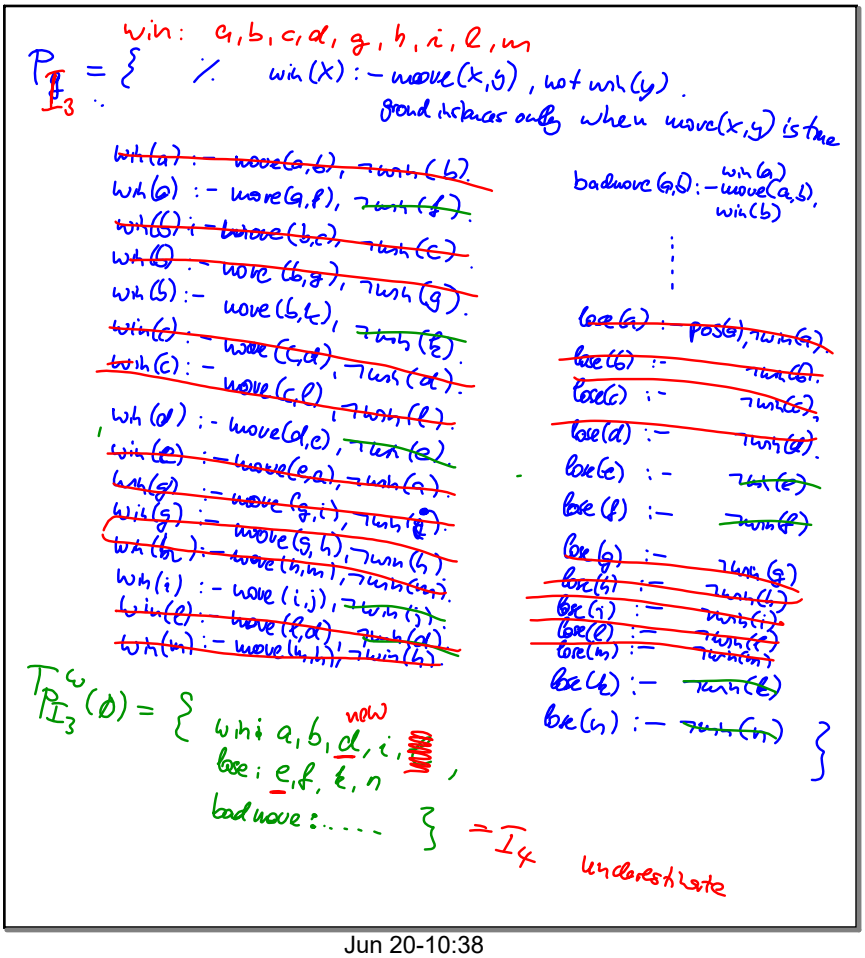

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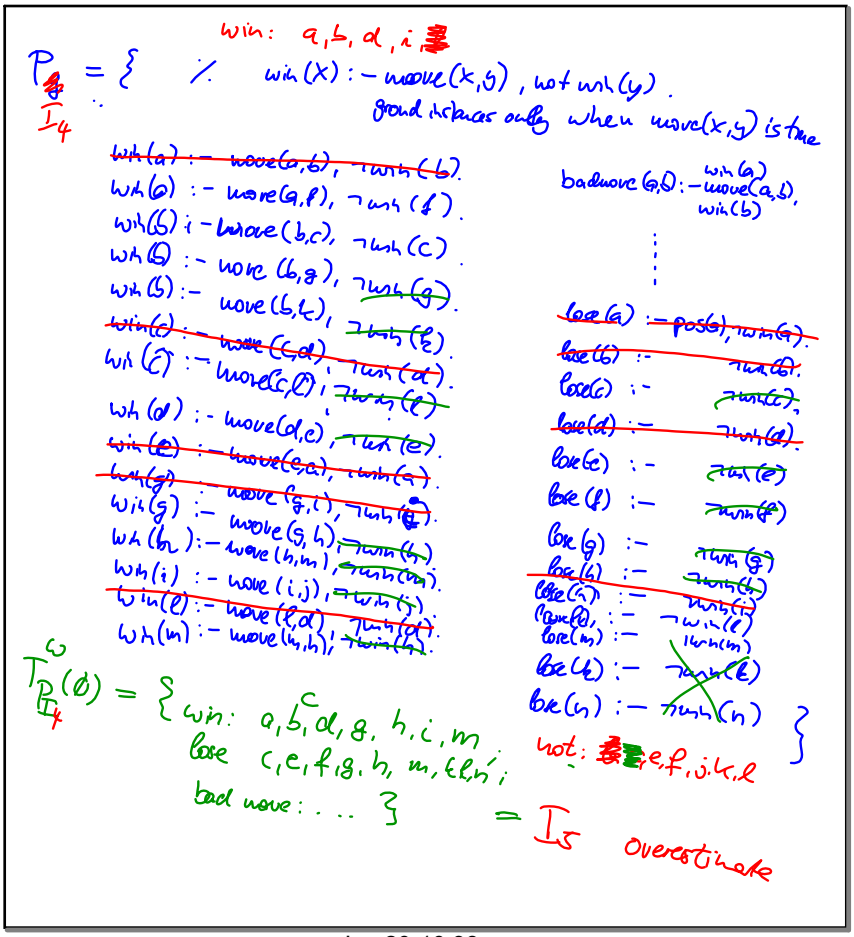

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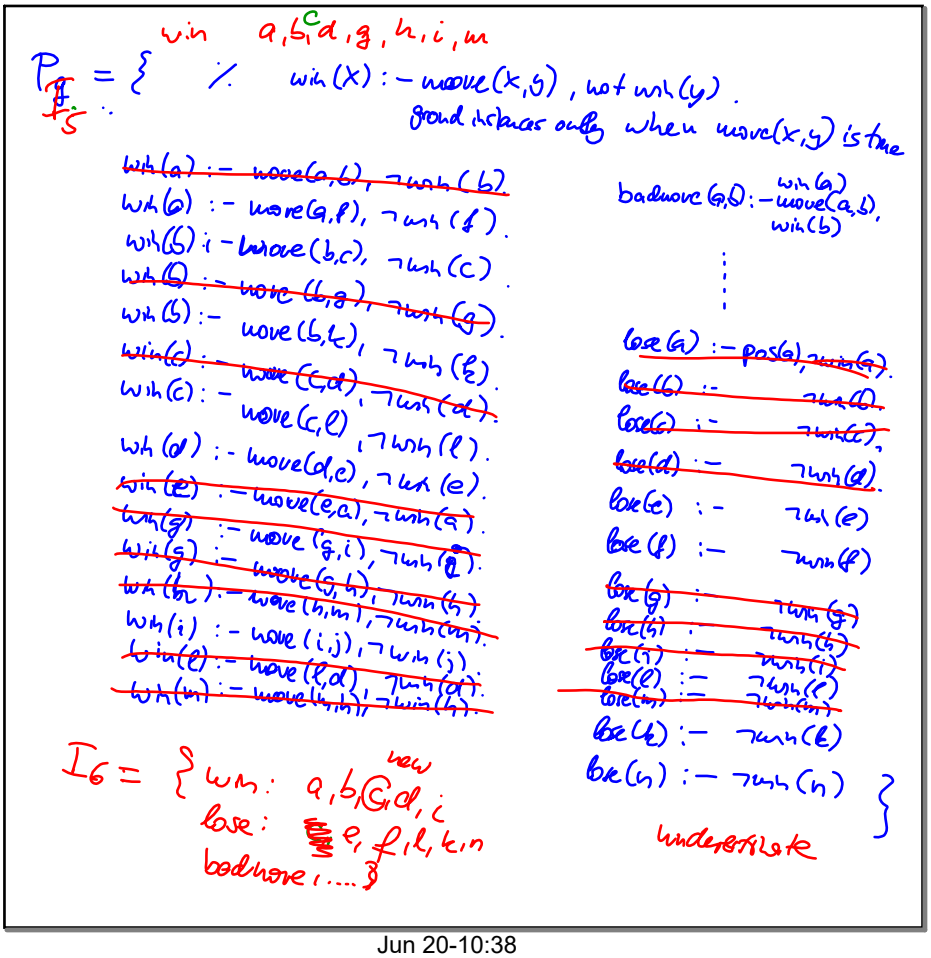

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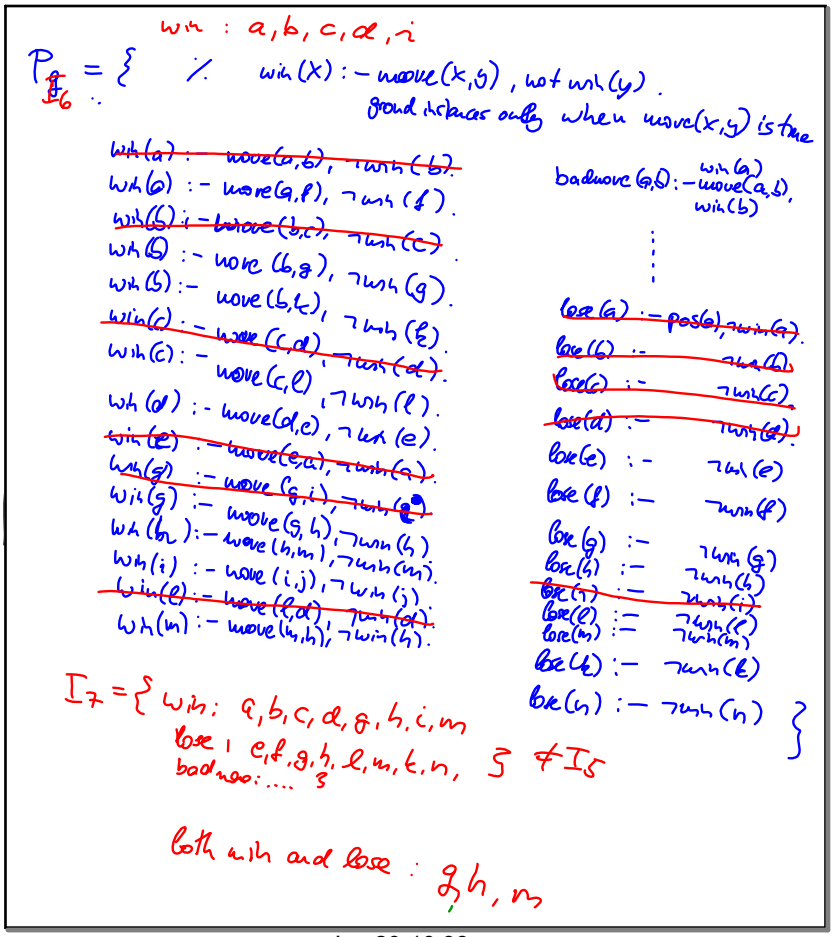

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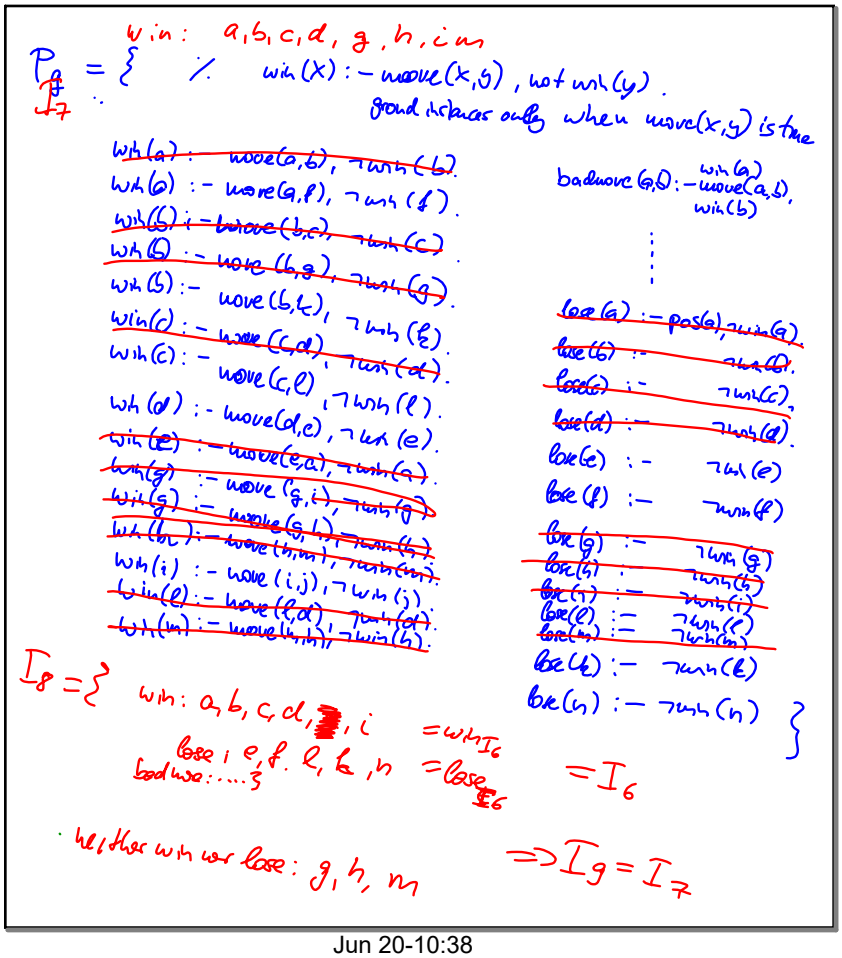

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