

Synthesized solution for benchmark 01loopprint.c

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solution
├─ (Complete), cond  $c_{17}$ :  $a > 5$ 
├─  $\left\{ \begin{array}{l} \text{Case } c_{17} : \\ k_1 = ((a_5 \vee b_6) \cdot P_9 \cdot I_8 \cdot J_7) * (\neg a_5 \wedge \neg b_6) \\ k_2 = ((a_{13} \vee b_{14}) \cdot D_{23} \cdot P_{20} \cdot I_{19} \cdot J_{18} \cdot (c_{17} \cdot V_{16} \cdot T_{15} + \neg c_{17} \cdot 1)) * (\neg a_{13} \wedge \neg b_{14}) \end{array} \right.$ 
├─ AComplete
├─  $\left\{ \begin{array}{l} \text{Axioms} : \{D = 1, E = 1, G = 1\} \\ k_1 = ((a_5 \vee b_6) \cdot P_9 \cdot I_8 \cdot J_7) * (\neg a_5 \wedge \neg b_6) \\ k_2 = ((a_{13} \vee b_{14}) \cdot D_{23} \cdot P_{20} \cdot I_{19} \cdot J_{18} \cdot 1 \cdot E_{24} \cdot G_{25}) * (\neg a_{13} \wedge \neg b_{14}) \end{array} \right.$ 
├─  $\left\{ \begin{array}{l} \text{Case } \neg c_{17} : \\ k_1 = ((a_5 \vee b_6) \cdot P_9 \cdot I_8 \cdot J_7) * (\neg a_5 \wedge \neg b_6) \\ k_2 = ((a_{13} \vee b_{14}) \cdot D_{23} \cdot P_{20} \cdot I_{19} \cdot J_{18} \cdot (c_{17} \cdot V_{16} \cdot T_{15} + \neg c_{17} \cdot 1)) * (\neg a_{13} \wedge \neg b_{14}) \end{array} \right.$ 
├─ AComplete
├─  $\left\{ \begin{array}{l} \text{Axioms} : \{D = 1\} \\ k_1 = ((a_5 \vee b_6) \cdot P_9 \cdot I_8 \cdot J_7) * (\neg a_5 \wedge \neg b_6) \\ k_2 = ((a_{13} \vee b_{14}) \cdot D_{23} \cdot P_{20} \cdot I_{19} \cdot J_{18} \cdot 1 \cdot 1) * (\neg a_{13} \wedge \neg b_{14}) \end{array} \right.$ 

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Remaining 10 solutions omitted for brevity.