

Synthesized solution for benchmark 01conclloop.c

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solution
├─ (Partial), cond  $b_{12}$ : number  $\geq 0$ 
│   └─  $\left\{ \begin{array}{l} \text{Case } b_{12} : \\ k_1 = O_8 \cdot (a_5 \cdot E_7 \cdot C_6) * \neg a_5 \\ k_2 = O_{16} \cdot D_{18} \cdot ((a_{11} \wedge b_{12}) \cdot E_{14} \cdot C_{13}) * (\neg a_{11} \vee \neg b_{12}) \end{array} \right.$ 
│       └─ (Partial), cond  $a_5$ : count  $\leq 4$ 
│           └─  $\left\{ \begin{array}{l} \text{Case } \neg a_5 : \\ k_1 = U_{19} \cdot (a_5 \cdot E_7 \cdot C_6) * \neg a_5 \\ k_2 = T_{20} \cdot D_{18} \cdot 1 \cdot ((a_{11} \wedge b_{12}) \cdot E_{14} \cdot C_{13}) * \neg a_{11} \end{array} \right.$ 
│               └─ (Partial), cond  $a_{11}$ : count  $\leq 4$ 
│                   └─  $\left\{ \begin{array}{l} \text{Case } \neg a_{11} : \\ k_1 = U_{19} \cdot 0 \cdot 0 \\ k_2 = T_{20} \cdot D_{18} \cdot 1 \cdot ((a_{11} \wedge b_{12}) \cdot E_{14} \cdot C_{13}) * \neg a_{11} \end{array} \right.$ 
│                       └─ AComplete
│                           └─  $\left\{ \begin{array}{l} \text{Axioms} : \{D = 1, U = 1, T = 1\} \\ k_1 = U_{19} \cdot 0 \cdot 0 \\ k_2 = T_{20} \cdot D_{18} \cdot 1 \cdot 0 \cdot 0 \end{array} \right.$ 

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Remaining 12 solutions ommitted for brevity.