

Synthesized solution for benchmark 01loopevent.c

```

solution
├─ (Partial), cond  $c_{16}$ :  $a > 5$ 
├─  $\left\{ \begin{array}{l} \text{Case } \neg c_{16} : \\ k_1 = ((a_5 \vee b_6) \cdot E_9 \cdot I_8 \cdot J_7) * (\neg a_5 \wedge \neg b_6) \\ k_2 = ((a_{13} \vee b_{14}) \cdot D_{22} \cdot E_{19} \cdot I_{18} \cdot J_{17} \cdot (c_{16} \cdot E_{15} + \neg c_{16} \cdot 1)) * (\neg a_{13} \wedge \neg b_{14}) \end{array} \right.$ 
├─ AComplete
├─  $\left\{ \begin{array}{l} \text{Axioms} : \{D = 1\} \\ k_1 = ((a_5 \vee b_6) \cdot E_9 \cdot I_8 \cdot J_7) * (\neg a_5 \wedge \neg b_6) \\ k_2 = ((a_{13} \vee b_{14}) \cdot D_{22} \cdot E_{19} \cdot I_{18} \cdot J_{17} \cdot 1) * (\neg a_{13} \wedge \neg b_{14}) \end{array} \right.$ 

```

Remaining 65 solutions omitted for brevity.