

Synthesized solution for benchmark 01assume.c

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solution
├─ (Complete), cond  $a_5$ : count  $\leq 4$ 
├─  $\left\{ \begin{array}{l} \text{Case } a_5 : \\ k_1 = D_{\text{count}} = \text{nondet}(); \cdot (a_{\text{count}} \leq 4 \cdot P() = \text{printf}(\text{count}); \cdot C_{\text{count}} = \text{count} + \_i, ? \ 1;) * \neg a_{\text{count}} \leq 4 \\ k_2 = E_{\text{count}} = \text{nondet}(); \cdot 1 \cdot ((a_{\text{count}} \leq 4 \wedge b_{\text{number}} \geq 0) \cdot P() = \text{printf}(\text{count}); \cdot C_{\text{count}} = \text{count} + \_i, ? \ 1;) * \neg a_{\text{count}} \leq 4 \end{array} \right.$ 
├─ (Complete), cond  $b_{12}$ : number  $\geq 0$ 
├─  $\left\{ \begin{array}{l} \text{Case } b_{12} : \\ k_1 = D_{\text{count}} = \text{nondet}(); \cdot 1 \cdot (a_{\text{count}} \leq 4 \cdot I() = \text{printf}(\text{count}); \cdot C_{\text{count}} = \text{count} + \_i, ? \ 1;) * \neg a_{\text{count}} \leq 4 \\ k_2 = E_{\text{count}} = \text{nondet}(); \cdot 1 \cdot ((a_{\text{count}} \leq 4 \wedge b_{\text{number}} \geq 0) \cdot P() = \text{printf}(\text{count}); \cdot C_{\text{count}} = \text{count} + \_i, ? \ 1;) * \neg a_{\text{count}} \leq 4 \end{array} \right.$ 
├─ AComplete
├─  $\left\{ \begin{array}{l} \text{Axioms} : \{D = 1, E = 1, I = 1, T = 1, U = 1\} \\ k_1 = D_{\text{count}} = \text{nondet}(); \cdot 1 \cdot (a_{\text{count}} \leq 4 \cdot I() = \text{printf}(\text{count}); \cdot U_{\text{count}} = \text{count} + \_i, ? \ 1;) * \neg a_{\text{count}} \leq 4 \\ k_2 = E_{\text{count}} = \text{nondet}(); \cdot 1 \cdot 1 \cdot ((a_{\text{count}} \leq 4 \wedge b_{\text{number}} \geq 0) \cdot T() = \text{printf}(\text{count}); \cdot C_{\text{count}} = \text{count} + \_i, ? \ 1;) * \neg a_{\text{count}} \leq 4 \end{array} \right.$ 
├─  $\left\{ \begin{array}{l} \text{Case } \neg a_5 : \\ k_1 = D_{\text{count}} = \text{nondet}(); \cdot (a_{\text{count}} \leq 4 \cdot P() = \text{printf}(\text{count}); \cdot C_{\text{count}} = \text{count} + \_i, ? \ 1;) * \neg a_{\text{count}} \leq 4 \\ k_2 = E_{\text{count}} = \text{nondet}(); \cdot 1 \cdot ((a_{\text{count}} \leq 4 \wedge b_{\text{number}} \geq 0) \cdot P() = \text{printf}(\text{count}); \cdot C_{\text{count}} = \text{count} + \_i, ? \ 1;) * \neg a_{\text{count}} \leq 4 \end{array} \right.$ 
├─ AComplete
├─  $\left\{ \begin{array}{l} \text{Axioms} : \{D = 1, E = 1\} \\ k_1 = D_{\text{count}} = \text{nondet}(); \cdot 1 \cdot (a_{\text{count}} \leq 4 \cdot 0) * \neg a_{\text{count}} \leq 4 \\ k_2 = E_{\text{count}} = \text{nondet}(); \cdot 1 \cdot ((a_{\text{count}} \leq 4 \wedge b_{\text{number}} \geq 0) \cdot P() = \text{printf}(\text{count}); \cdot C_{\text{count}} = \text{count} + \_i, ? \ 1;) * \neg a_{\text{count}} \leq 4 \end{array} \right.$ 

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Remaining 42 solutions omitted for brevity.