

Synthesized solution for benchmark 03buffer.c

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solution
├─ (Partial), cond  $a_6$ : brk < 1
│   └─  $\left\{ \begin{array}{l} \text{Case } a_6 : \\ k_1 = M_{fv\_1} = 1024; \cdot Y_{buffer} = \text{array\_alloc}(fv\_1); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot (a_6 \cdot G_c = \text{getchar}(); \cdot (c_{12} \cdot B_{brk} = 1; + \neg c_{12} \cdot (b_{11} \cdot B_{brk} = 1; + \neg b_{11} \cdot W() = \text{array\_write}(\text{buffer}, i, c); \cdot O_i = i + i, ? \ 1;))) * \neg a_6 \\ k_2 = N_{fv\_2} = 1024; \cdot L_{buffer} = \text{array\_alloc}(fv\_2); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot (a_{19} \cdot G_c = \text{getchar}(); \cdot (c_{24} \cdot B_{brk} = 1; + \neg c_{24} \cdot (b_{23} \cdot B_{brk} = 1; + \neg b_{23} \cdot B_{brk} = 1;))) * \neg a_{19} \end{array} \right.$ 
│       └─ AComplete
│           └─  $\left\{ \begin{array}{l} \text{Axioms} : \{M = 1, N = 1, Y = L, W = 1, O = 1, P = 1\} \\ k_1 = M_{fv\_1} = 1024; \cdot Y_{buffer} = \text{array\_alloc}(fv\_1); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot 1 \cdot (a_6 \cdot G_c = \text{getchar}(); \cdot (c_{12} \cdot B_{brk} = 1; + \neg c_{12} \cdot (b_{11} \cdot B_{brk} = 1; + \neg b_{11} \cdot W() = \text{array\_write}(\text{buffer}, i, c); \cdot O_i = i + i, ? \ 1;))) * \\ \neg a_6 \\ k_2 = N_{fv\_2} = 1024; \cdot L_{buffer} = \text{array\_alloc}(fv\_2); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot (a_{19} \cdot G_c = \text{getchar}(); \cdot (c_{24} \cdot B_{brk} = 1; + \neg c_{24} \cdot (b_{23} \cdot B_{brk} = 1; + \neg b_{23} \cdot B_{brk} = 1;))) * \neg a_{19} \end{array} \right.$ 
│       └─  $\left\{ \begin{array}{l} \text{Case } \neg a_6 : \\ k_1 = M_{fv\_1} = 1024; \cdot Y_{buffer} = \text{array\_alloc}(fv\_1); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot (a_6 \cdot G_c = \text{getchar}(); \cdot (c_{12} \cdot B_{brk} = 1; + \neg c_{12} \cdot (b_{11} \cdot B_{brk} = 1; + \neg b_{11} \cdot W() = \text{array\_write}(\text{buffer}, i, c); \cdot O_i = i + i, ? \ 1;))) * \neg a_6 \\ k_2 = N_{fv\_2} = 1024; \cdot L_{buffer} = \text{array\_alloc}(fv\_2); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot (a_{19} \cdot G_c = \text{getchar}(); \cdot (c_{24} \cdot B_{brk} = 1; + \neg c_{24} \cdot (b_{23} \cdot B_{brk} = 1; + \neg b_{23} \cdot B_{brk} = 1;))) * \neg a_{19} \end{array} \right.$ 
│       └─ (Partial), cond  $a_{19}$ : brk < 1
│           └─  $\left\{ \begin{array}{l} \text{Case } \neg a_{19} : \\ k_1 = M_{fv\_1} = 1024; \cdot Y_{buffer} = \text{array\_alloc}(fv\_1); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot 0 \cdot 0 \\ k_2 = N_{fv\_2} = 1024; \cdot L_{buffer} = \text{array\_alloc}(fv\_2); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot (a_{19} \cdot G_c = \text{getchar}(); \cdot (c_{24} \cdot B_{brk} = 1; + \neg c_{24} \cdot (b_{23} \cdot B_{brk} = 1; + \neg b_{23} \cdot B_{brk} = 1;))) * \neg a_{19} \end{array} \right.$ 
│               └─ AComplete
│                   └─  $\left\{ \begin{array}{l} \text{Axioms} : \{M = 1, N = 1, Y = L, W = 1, O = 1\} \\ k_1 = M_{fv\_1} = 1024; \cdot Y_{buffer} = \text{array\_alloc}(fv\_1); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot 0 \cdot 0 \\ k_2 = N_{fv\_2} = 1024; \cdot L_{buffer} = \text{array\_alloc}(fv\_2); \cdot C_i = 0; \cdot K_{brk} = 0; \cdot 0 \cdot 0 \end{array} \right.$ 

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Remaining 190 solutions ommitted for brevity.