

## Synthesized solution for benchmark 01linarith.c

solution  
 $\vdash$  AComplete  
 $\vdash$   $\left\{ \begin{array}{l} \text{Axioms : } \{G = 1, J = 1, T = 1, S = I\} \\ k_1 = c = \text{nondet}(); \text{servers} = 4; \text{resp} = 0; \text{curr\_serv} = \text{servers}; \text{tmp} = \text{nondet}(); \{a_5 \cdot 1 \cdot c = c - i, ?1; () = \text{shutdown}(); \\ \text{curr\_serv} = \text{curr\_serv} - i, ?1; \text{resp} = \text{resp} + i, ?1; \text{tmp} = \text{nondet}();\} * \neg a_5 \\ k_2 = c = \text{nondet}(); \text{servers} = 4; \text{resp} = 0; \text{curr\_serv} = \text{servers}; \text{tmp} = \text{nondet}(); \{a_{17} \cdot 1 \cdot () = \text{pingall}(); \\ \text{curr\_serv} = \text{curr\_serv} - i, ?1; c = c - i, ?1; \text{resp} = \text{resp} + i, ?1; () = \text{shutdown}(); \\ \text{tmp} = \text{nondet}();\} * \neg a_{17} \end{array} \right.$

*Remaining 10 solutions omitted for brevity.*