```
Results for RCXP (in 00:00:12.866):
    NB EV: 4
    AP: AP1
    NB AP: 2
    NB_MAY: -1
    NB_MUST_MINUS: -1
    NB MUST PLUS: -1
    NB MUST SHARP: -1
    NB AS: 3
    NB AS RCHD: 3
    TAU AS: 100.00
    NB AT: 9
    NB_AT_RCHD: 9
    TAU AT: 100.00
    NB_EXPECTED_AS: 3
    NB_EXPECTED_AS_RCHD: 3
    TAU EXPECTED AS: 100.00
    NB EXPECTED AT: 1
    NB EXPECTED AT RCHD: 1
    TAU_EXPECTED_AT: 100.00
    NB CS: 54
    NB CS RCHD: 40
    NB CT: 52
    NB CT RCHD: 44
    RHO CS: 74.07
    RHO CT: 84.62
    NB TESTS: 6
    NB_STEPS: 57
       \texttt{c0q1} = \texttt{bat(1)} = 9, \ \texttt{bat(2)} = 9, \ \texttt{bat(3)} = 9, \ \texttt{bat(4)} = 9, \ \texttt{bat(5)} = 9, \ \texttt{bat(6)} = 9, \ \texttt{bat(7)} = 9, \ \texttt{bat(8)} = 9, \ \texttt{h=7}, \ \texttt{sw=1} - [ \ \texttt{Fail} \ ] -> \ \texttt{c1q1} = \ \texttt{bat(1)} = 9, \ \texttt{bat(2)} = 9, \ \texttt{bat(3)} = 9, \ \texttt{bat(3)
    bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=1 clq1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=9, bat(8)=8, bat(8)=
  C1q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=9, bat(8)=8, h=7, Sw=1 -[ 11c ]-> c8q2 = bat(1)=9, bat(2)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=6, sw=1 -[ Fail ]-> c15q2 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(6)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=1 -[ Fail ]-> c29q2 = bat(1)=8, bat(2)=9, bat(2)=9, bat(3)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=1 -[ Fail ]-> c29q2 = bat(1)=8, bat(2)=9, bat(2)=9, bat(3)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=1 -[ Fail ]-> c29q2 = bat(1)=8, bat(2)=9, bat(2)=9, bat(3)=9, bat(3)=9, bat(3)=9, bat(5)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=1 -[ Fail ]-> c29q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(3)=9, bat(3)=9, bat(5)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=1 -[ Fail ]-> c29q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(3)=9, bat(3)=9, bat(3)=9, bat(5)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=1 -[ Fail ]-> c29q2 = bat(1)=8, bat(2)=9, bat(3)=9, b
  bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=9, bat(6)=9, bat(6)=9, bat(6)=9, bat(7)=8, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=2

c29q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=2 -[ Fail ]-> c30q2 = bat(1)=8, bat(2)=8, bat(3)=9, bat(4)=9, bat(6)=9, bat(6)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=4

c30q2 = bat(1)=8, bat(2)=8, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=4 -[ Fail ]-> c31q2 = bat(1)=8, bat(2)=8,
  C3902 = Dat(1)=8, Dat(2)=8, Dat(3)=9, Dat(4)=9, Dat(5)=9, Dat(5)=9, Dat(7)=8, Dat(7)=8
    bat(3)=9, bat(4)=8, bat(5)=8, bat(6)=8, bat(7)=8, bat(6)=8, bat(6)
    c0q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=9, bat(8)=9, bat(2)=9, bat(2)=9
c0q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=9, h=7, sw=1 -[ Fail ]-> c1q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=1 c1q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=1 -[ Tic ]-> c8q2 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=6, sw=1 -[ Repair ]-> c19q2 = bat(1)=9, bat(2)=9, bat(3)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(7)=9, bat(8)=8, h=6, sw=1 -[ Fail ]-> c2q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(7)=9, bat(8)=9, h=6, sw=1 -[ Fail ]-> c2q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=9, bat(7)=9, bat(8)=9, h=6, sw=6 -[ Fail ]-> c23q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=9, bat(6)=8, bat(7)=9, bat(8)=9, h=6, sw=7 -[ Fail ]-> c24q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(5)=9, bat(5)=9, bat(5)=9, bat(6)=8, bat(7)=9, bat(6)=8, bat(7)=9, bat(8)=8, h=6, sw=7 -[ Fail ]-> c24q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=9, bat(6)=8, bat(7)=9, bat(8)=8, h=6, sw=7 -[ Fail ]-> c25q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=9, bat(6)=8, bat(7)=9, bat(8)=8, h=6, sw=7 -[ Fail ]-> c25q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=9, bat(6)=8, bat(7
    bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=4 c25q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=4 -[ Fail ]-> c26q2 = bat(1)=8, bat(2)=9, bat(4)=9, bat(5)=9, bat(4)=9, bat(5)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=4 -[ Fail ]-> c26q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=4 -[ Fail ]-> c26q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=4 -[ Fail ]-> c26q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(4)=9, bat(5)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=4 -[ Fail ]-> c26q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(4)=9, bat(5)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(7)=8, bat(8)=8, bat(7)=8, bat(8)=8, bat(8)=8
    bat(3)=9, bat(4)=9, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=4 c26q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, bat(8)
    bat(3)=9, bat(4)=8, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=2 c27q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=8, bat(5)=8, bat(5)=8, bat(7)=8, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=2 -[ Fail ]-> c28q0 = bat(1)=8, bat(2)=9, bat(4)=8, bat(5)=8, bat(5)=8, bat(6)=8, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=2 -[ Fail ]-> c28q0 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=8, bat(5)=8, bat(5)=8, bat(6)=8, bat(7)=8, bat(7)=8, bat(8)=8, h=6, sw=2 -[ Fail ]-> c28q0 = bat(1)=8, bat(2)=9, bat(3)=9, bat(3)=9
    bat(3)=8, bat(4)=8, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=2 c28q0 = bat(1)=8, bat(2)=9, bat(3)=8, bat(4)=8, bat(5)=8, bat(6)=8, bat(6)=8, bat(8)=8, bat(8)
    bat(3)=8, bat(4)=8, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=2
  c0q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=9, bat(8)=9, bat(9)=9, bat(9)=9
    c45q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=9, bat(8)=9
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c46q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, bat(8)=8, bat(9)=9, bat(1)=8, bat(1)=8, bat(2)=9, bat(3)=9, bat(3)=9

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bat(3)=9, bat(4)=8, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=5 
c47q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=8, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=5 -[ Fail ]-> c48q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=8, bat(5)=8, bat(6)=9, bat(5)=8, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=6 -[ Fail ]-> c49q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=8, bat(5)=8, bat(5)=8, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=6 -[ Fail ]-> c49q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(3)=9, bat(3)=9, bat(3)=9, bat(3)=9, bat(4)=8, bat(5)=8, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=6 -[ Fail ]-> c49q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(3)=
   bat(3)=9, bat(4)=8, bat(5)=8, bat(6)=9, bat(7)=8, bat(8)=8, h=7, sw=6 c49q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=8, bat(5)=8, bat(6)=9, bat(7)=8, bat(8)=8, h=7, sw=6 -[ Fail ]-> c50q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(3)=9, bat(4)=8, bat(5)=8, bat(6)=9, bat(7)=8, bat(8)=8, h=7, sw=6 -[ Fail ]-> c50q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(3)=9
 table to the table to t
 C30q1 = Dat(1)=5, Dat(2)=5, Dat(3)=6, Dat(3)=6, Dat(4)=6, Dat(4)=6, Dat(4)=6, Dat(4)=8, Dat(4)=8, Dat(4)=8, Dat(4)=8, Dat(6)=8, Dat(6)=8, Dat(6)=8, Dat(7)=8, Dat(7)=8, Dat(8)=8, Dat(8)=8
bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=6 c40q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=6, sw=6 -[ Fail ]-> c25q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=4 c25q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=8, bat(6)=8, bat(7)=8, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=4 -[ Fail ]-> c26q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=4 -[ Fail ]-> c27q2 = bat(1)=8, bat(2)=9, bat(3)=9, bat(3)=9, bat(4)=9, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, bat(8)=8, h=6, sw=2 -[ Repair ]-> c51q2 = bat(1)=9, bat(3)=8, bat(4)=8, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, bat(7)=8, bat(8)=8, h=6, sw=2 -[ Repair ]-> c51q2 = bat(1)=9, bat(3)=8, bat(4)=8, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=2
   bat(3)=8, bat(4)=8, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, h=6, sw=2
Dat(3)=9, Dat(4)=9, Dat(5)=9, Dat(6)=9, Dat(7)=8, Dat(8)=8, N=7, SW=0 c34q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=8, bat(7)=8, bat(8)=8, h=7, SW=6 -[Fail]-> c35q1 = bat(1)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(8)=8, h=7, SW=4 c35q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(8)=8, h=7, SW=4 -[Fail]-> c36q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, h=7, SW=4
 Dat(3)=9, Dat(4)=9, Dat(5)=8, Dat(6)=8, Dat(7)=8, Dat(8)=8, N=7, Sw=4 c36q1 = Dat(1)=9, Dat(2)=9, Dat(2)=9, Dat(3)=9, Dat(4)=9, Dat(4)=8, Dat(6)=8, Dat(7)=8, Dat(7)=8, Dat(8)=8, N=7, Sw=4 -[Fail]-> c37q1 = Dat(1)=9, Dat(2)=9, Dat(3)=9, Dat(4)=8, Dat(6)=8, Dat(7)=8, Dat(8)=8, N=7, Sw=1 c37q1 = Dat(1)=9, Dat(2)=9, Dat(3)=9, Dat(4)=8, Dat(5)=8, Dat(5)=8, Dat(5)=8, Dat(5)=8, Dat(6)=8, Dat(7)=8, Dat(7)=8, Dat(7)=8, Dat(8)=8, Dat(7)=8, Dat(8)=8, Da
 c1q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(6)=9, bat(6)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=1 -[Fail ]-> c41q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(6)=9, bat(6)=9, bat(8)=8, h=7, sw=6 -[Fail ]-> c41q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(7)=9, bat(7)=9, bat(8)=8, h=7, sw=6 -[Fail ]-> c42q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(6)=9, bat(6)=9, bat(8)=8, h=7, sw=6
   c42q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=8, bat(8)=8, bat(8)=8, bat(8)=8, bat(9)=8, bat(9)=9, bat(4)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(8)=8, bat(8)=8
   c43q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=8, bat(7)=8, bat(8)=8, bat(8)=8, bat(8)=8, bat(9)=8, bat(9)=8
   c44q1 = bat(1)=8, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=8, bat(6)=8, bat(7)=8, bat(8)=8, bat(8)=8, bat(9)=8, bat(9)=8
   \text{C2}(1) = \text{bat}(3) - 3, \text{bat}(3) 
    \begin{split} & \mathsf{SET}\_\mathsf{EXPECTED\_AS:} \\ & \emptyset = \neg(\mathsf{p}\emptyset = \exists (\texttt{i}, \texttt{j}).(\mathsf{and}(\mathsf{and}(\texttt{i} \in [1..n], \texttt{j} \in [1..n]), \texttt{and}(\texttt{i} \neq \texttt{j}, \texttt{bat}(\texttt{i}) = \texttt{ok}[9], \texttt{bat}(\texttt{j}) = \texttt{ok}[9], \texttt{h=tic}[6])))), \ \neg(\mathsf{p}1 = \texttt{h=tac}[7]) \\ & \emptyset = \neg(\mathsf{p}\emptyset = \exists (\texttt{i}, \texttt{j}).(\mathsf{and}(\mathsf{and}(\texttt{i} \in [1..n], \texttt{j} \in [1..n]), \texttt{and}(\texttt{i} \neq \texttt{j}, \texttt{bat}(\texttt{i}) = \texttt{ok}[9], \texttt{bat}(\texttt{j}) = \texttt{ok}[9], \texttt{h=tic}[6])))), \ \neg(\mathsf{p}1 = \texttt{h=tac}[7]) \\ & \emptyset = \neg(\mathsf{p}\emptyset = \exists (\texttt{i}, \texttt{j}).(\mathsf{and}(\mathsf{and}(\texttt{i} \in [1..n], \texttt{j} \in [1..n]), \texttt{and}(\texttt{i} \neq \texttt{j}, \texttt{bat}(\texttt{i}) = \texttt{ok}[9], \texttt{bat}(\texttt{j}) = \texttt{ok}[9], \texttt{h=tic}[6])))), \ \neg(\mathsf{p}1 = \texttt{h=tac}[7]) \end{aligned} 
   SET RCHD AS:
    \begin{array}{l} \exists i \in A(n) = \exists (i, j). (and(and(i \in [1..n], j \in [1..n]), \ and(i \neq j, \ bat(i) = ok[9], \ bat(j) = ok[9], \ h = tic[6])))), \ \neg (p1 = h = tac[7]) \\ q1 = \neg (p0 = \exists (i, j). (and(and(i \in [1..n], j \in [1..n]), \ and(i \neq j, \ bat(i) = ok[9], \ bat(j) = ok[9], \ h = tic[6])))), \ \neg (p1 = h = tac[7]) \\ q2 = (p0 = \exists (i, j). (and(and(i \in [1..n], j \in [1..n]), \ and(i \neq j, \ bat(i) = ok[9], \ bat(j) = ok[9], \ h = tic[6])))), \ \neg (p1 = h = tac[7]) \\ \end{array} 
   SET RCHD EXPECTED AS:
    \begin{array}{l} \exists i \in \text{CND} = \exists (i, j) . (\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \ \text{and}(i \neq j, \ \text{bat}(i) = \text{ok}[9], \ \text{bat}(j) = \text{ok}[9], \ \text{h=tic}[6])))), \ \neg(\text{p1} = \text{h=tac}[7]) \\ q1 = \neg(\text{p0} = \exists (i, j) . (\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \ \text{and}(i \neq j, \ \text{bat}(i) = \text{ok}[9], \ \text{bat}(j) = \text{ok}[9], \ \text{h=tic}[6])))), \ \neg(\text{p1} = \text{h=tac}[7]) \\ q2 = (\text{p0} = \exists (i, j) . (\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \ \text{and}(i \neq j, \ \text{bat}(i) = \text{ok}[9], \ \text{bat}(j) = \text{ok}[9], \ \text{h=tic}[6])))), \ \neg(\text{p1} = \text{h=tac}[7]) \\ \end{array} 
  \begin{array}{l} \mathsf{SET} \ \underline{\mathsf{EXPECTED}} \ \mathsf{AT}: \\ \mathsf{q1} \ = \ \neg(\mathsf{p0} \ = \ \overline{\exists}(\mathsf{i},\ \mathsf{j}).(\mathsf{and}(\mathsf{and}(\mathsf{i} \ \in \ [1..n]),\ \mathsf{j} \ \in \ [1..n]),\ \mathsf{and}(\mathsf{i} \ \neq \ \mathsf{j},\ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9],\ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9],\ \mathsf{h} = \mathsf{tic}[6])))),\ (\mathsf{p1} \ = \ \mathsf{h} = \mathsf{tac}[7]) \ -[\ \mathsf{Tic}\ ] -> \ \mathsf{q0} \ = \ \neg(\mathsf{p0} \ = \ \exists(\mathsf{i},\ \mathsf{j}).(\mathsf{and}(\mathsf{and}(\mathsf{i} \ \in \ [1..n]),\ \mathsf{j} \ \in \ [1..n]),\ \mathsf{and}(\mathsf{i} \ \neq \ \mathsf{j},\ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9],\ \mathsf{h} = \mathsf{tic}[6])))),\ \neg(\mathsf{p1} \ = \ \mathsf{h} = \mathsf{tac}[7]) \end{array} 
 \begin{split} & \mathsf{SET}_{\mathsf{RCHD\_AT:}} \\ & \emptyset = \neg(p\emptyset = \exists (\mathsf{i}, \ \mathsf{j})) . (\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \ \mathsf{j} \in [1..n]), \ \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9], \ \mathsf{hetic}[\mathsf{6}])))), \ \neg(\mathsf{p1} = \mathsf{hetac}[\mathsf{7}]) \ -[ \ \mathsf{Repair} \ ] -> \ \mathsf{q2} = \\ & (\mathsf{p0} = \exists (\mathsf{i}, \ \mathsf{j})) . (\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \ \mathsf{j} \in [1..n]), \ \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9], \ \mathsf{hetic}[\mathsf{6}])))), \ \neg(\mathsf{p1} = \mathsf{hetac}[\mathsf{7}]) \ -[ \ \mathsf{Fail} \ ] -> \ \mathsf{q1} = \neg(\mathsf{p0} = \exists (\mathsf{i}, \ \mathsf{j})) . (\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \ \mathsf{j} \in [1..n]), \ \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9], \ \mathsf{hetic}[\mathsf{6}])))), \ (\mathsf{p1} = \mathsf{hetac}[\mathsf{7}]) \ -[ \ \mathsf{Fail} \ ] -> \ \mathsf{q1} = \neg(\mathsf{p0} = \exists (\mathsf{i}, \ \mathsf{j})) . (\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \ \mathsf{j} \in [1..n]), \ \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9], \ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9], \ \mathsf{hetic}[\mathsf{6}])))), \ (\mathsf{p1} = \mathsf{hetac}[\mathsf{7}]) \ -[ \ \mathsf{Repair} \ ] -> \ \mathsf{q1} = \neg(\mathsf{p0} = \exists (\mathsf{i}, \ \mathsf{j})) . (\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \ \mathsf{j} \in [1..n]), \ \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9], \ \mathsf{hetic}[\mathsf{6}])))), \ (\mathsf{p1} = \mathsf{hetac}[\mathsf{7}]) \ -[ \ \mathsf{Repair} \ ] -> \ \mathsf{q1} = \neg(\mathsf{p0} = \exists (\mathsf{i}, \ \mathsf{j})) . (\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \ \mathsf{j} \in [1..n]), \ \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9], \ \mathsf{hetic}[\mathsf{6}])))), \ (\mathsf{p1} = \mathsf{hetac}[\mathsf{7}]) \ -[ \ \mathsf{Tic} \ ] -> \ \mathsf{q0} = \neg(\mathsf{p0} = \exists (\mathsf{i}, \ \mathsf{j})) . (\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \ \mathsf{j} \in [1..n]), \ \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9], \ \mathsf{hetic}[\mathsf{6}])))), \ (\mathsf{p1} = \mathsf{hetac}[\mathsf{7}]) \ -[ \ \mathsf{Tic} \ ] -> \ \mathsf{q0} = \neg(\mathsf{p0} = \exists (\mathsf{i}, \ \mathsf{j})) . (\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \ \mathsf{j} \in [1..n]), \ \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9], \ \mathsf{hetic}[\mathsf{6}])))), \ (\mathsf{p1} = \mathsf{hetac}[\mathsf{7}]) \ -[ \ \mathsf{Tic} \ ] -> \ \mathsf{q2} = (\mathsf{p0} = \exists (\mathsf{j}, \ \mathsf{j})) . (\mathsf{jnd}(\mathsf{and}(\mathsf{i} \in [1..n], \ \mathsf{j} \in [1..n], \ \mathsf{j}, \mathsf{j}), \ \mathsf{jnd}(\mathsf{jnd}(\mathsf{j} \in [1..n], \ \mathsf
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= 3(i, j).(and(and(i ∈ [1..n], j ∈ [1..n]), and(i ≠ j, bat(i)=ok[9], bat(j)=ok[9], h=tic[6]))), ¬(p1 = h=tac[7])
q2 = (p0 = 3(i, j).(and(and(i ∈ [1..n], j ∈ [1..n]), and(i ≠ j, bat(i)=ok[9], bat(j)=ok[9], h=tic[6])))), ¬(p1 = h=tac[7]) ¬[ Fail ]-> q2 = (p0 = 3(i, j).(and(and(i ∈ [1..n], j ∈ [1..n]), and(i ≠ j, bat(i)=ok[9], bat(j)=ok[9], h=tic[6])))), ¬(p1 = h=tac[7]) ¬[ Repair ]-> q2 = (p0 = 3(i, j).(and(and(i ∈ [1..n], j ∈ [1..n]), and(i ≠ j, bat(i)=ok[9], bat(j)=ok[9], h=tic[6])))), ¬(p1 = h=tac[7]) ¬[ Repair ]-> q2 = (p0 = 3(i, j).(and(and(i ∈ [1..n], j ∈ [1..n]), and(i ≠ j, bat(i)=ok[9], bat(j)=ok[9], h=tic[6]))), ¬(p1 = h=tac[7]) ¬[ Repair ]-> q2 = (p0 = 3(i, j).(and(and(i ∈ [1..n], j ∈ [1..n]), and(i ≠ j, bat(i)=ok[9], bat(j)=ok[9], h=tic[6]))), ¬(p1 = h=tac[7]) ¬[ Tic ]-> q0 = ¬(p0 = 3(i, j).(and(and(i ∈ [1..n], j ∈ [1..n]), and(i ≠ j, bat(i)=ok[9], bat(j)=ok[9], h=tic[6]))), ¬(p1 = h=tac[7]) ¬[ Tic ]-> q0 = ¬(p0 = 3(i, j).(and(and(i ∈ [1..n], j ∈ [1..n]), and(i ≠ j, bat(i)=ok[9], bat(j)=ok[9], h=tic[6])))), ¬(p1 = h=tac[7])

SET_UNRCHD_AS:

SET_UNRCHD_EXPECTED_AS:

SET_UNRCHD_EXPECTED_AT:

SET_UNRCHD_EXPECTED_AT:
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TIME_ATS: 00:00:12.866
TIME_TESTS: 00:00:00.002