

Results for CXPASO (in 00:00:01.521):

NB_EV: 19
AP: AP1
NB_AP: 3
NB_MAY: -1
NB_MUST_MINUS: -1
NB_MUST_PLUS: -1
NB_MUST_SHARP: -1
NB_AS: 6
NB_AS_RCHD: 4
TAU_AS: 66.67
NB_AT: 60
NB_AT_RCHD: 38
TAU_AT: 63.33
NB_EXPECTED_AS: 6
NB_EXPECTED_AS_RCHD: 4
TAU_EXPECTED_AS: 66.67
NB_EXPECTED_AT: 56
NB_EXPECTED_AT_RCHD: 38
TAU_EXPECTED_AT: 67.86
NB_CS: 48
NB_CS_RCHD: 22
NB_CT: 70
NB_CT_RCHD: 45
RHO_CS: 45.83
RHO_CT: 64.29
NB_TESTS: 2
NB_STEPS: 51

TESTS:
c0q6 = AC=0, Be=0, CS=0, De=0, Do=0, Gl=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Doors_Opening]-> c3q4 = AC=0, Be=0, CS=0, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c3q4 = AC=0, Be=0, CS=0, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Ch_Sec_Activation]-> c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Doors_Closing]-> c11q2 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c11q2 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Glasses_Opening]-> c16q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c16q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Car_Moving]-> c18q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c18q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Car_Stopping]-> c16q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c16q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Car_Moving]-> c18q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c18q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Light_Activation]-> c42q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c42q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=1, Lo=0, Mv=1, Tr=0, Us=1, Wa=0 - [Light_Deactivation]-> c18q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=1, Lo=0, Mv=1, Tr=0, Us=1, Wa=0
c18q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=1, Lo=0, Mv=1, Tr=0, Us=1, Wa=0 - [Glasses_Closing]-> c14q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=1, Tr=0, Us=1, Wa=0
c14q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=1, Tr=0, Us=1, Wa=0 - [Car_Stopping]-> c11q2 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=1, Tr=0, Us=1, Wa=0
c11q2 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Doors_Opening]-> c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Ch_Sec_Deactivation]-> c3q4 = AC=0, Be=0, CS=0, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c3q4 = AC=0, Be=0, CS=0, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Glasses_Opening]-> c8q4 = AC=0, Be=0, CS=0, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c8q4 = AC=0, Be=0, CS=0, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Glasses_Closing]-> c3q4 = AC=0, Be=0, CS=0, De=0, Do=1, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c3q4 = AC=0, Be=0, CS=0, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Ch_Sec_Activation]-> c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Glasses_Opening]-> c12q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c12q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Doors_Closing]-> c16q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c16q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Doors_Opening]-> c12q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c12q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Glasses_Opening]-> c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Light_Activation]-> c13q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=1, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c13q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=1, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Light_Deactivation]-> c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c7q0 = AC=0, Be=0, CS=1, De=0, Do=1, Gl=1, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Doors_Closing]-> c11q2 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c11q2 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Car_Moving]-> c14q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=1, Tr=0, Us=1, Wa=0
c14q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=1, Tr=0, Us=1, Wa=0 - [Car_Stopping]-> c11q2 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0
c11q2 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0 - [Glasses_Opening]-> c16q0 = AC=0, Be=0, CS=1, De=0, Do=0, Gl=0, Li=0, Lo=0, Mv=0, Tr=0, Us=1, Wa=0

SET_EXPECTED_AS:

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q0 =  $\neg(p_0 = CS=0), \neg(p_1 = \text{and}(\text{Tr}=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p_2 = \text{and}(\text{Tr}=0, Lo=1, Do=0, Us=1))$ 
q1 =  $\neg(p_0 = CS=0), \neg(p_1 = \text{and}(\text{Tr}=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p_2 = \text{and}(\text{Tr}=0, Lo=1, Do=0, Us=1))$ 
q2 =  $\neg(p_0 = CS=0), (p_1 = \text{and}(\text{Tr}=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p_2 = \text{and}(\text{Tr}=0, Lo=1, Do=0, Us=1))$ 
q4 =  $(p_0 = CS=0), \neg(p_1 = \text{and}(\text{Tr}=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p_2 = \text{and}(\text{Tr}=0, Lo=1, Do=0, Us=1))$ 
q5 =  $(p_0 = CS=0), \neg(p_1 = \text{and}(\text{Tr}=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p_2 = \text{and}(\text{Tr}=0, Lo=1, Do=0, Us=1))$ 
q6 =  $(p_0 = CS=0), (p_1 = \text{and}(\text{Tr}=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p_2 = \text{and}(\text{Tr}=0, Lo=1, Do=0, Us=1))$ 

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SET RCHD AS:

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q0 = ~(p0 = CS=0), ~(p1 = and(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), ~(p2 = and(Tr=0, Lo=1, Do=0, Us=1))
q2 = ~(p0 = CS=0), (p1 = and(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), ~(p2 = and(Tr=0, Lo=1, Do=0, Us=1))
q4 = (p0 = CS=0), ~(p1 = and(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), ~(p2 = and(Tr=0, Lo=1, Do=0, Us=1))
q6 = (p0 = CS=0), (p1 = and(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), ~(p2 = and(Tr=0, Lo=1, Do=0, Us=1))

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SET_RCHD_EXPECTED_AS:

$$\begin{aligned}
q0 &= \neg(p0 = CS = 0), \neg(p1 = \text{and}(\text{Tr}=0, \text{Mv}=0, \text{Do}=0, \text{Us}=1, \text{Lo}=0, \text{Gl}=0, \text{AC}=0)), \neg(p2 = \text{and}(\text{Tr}=0, \text{Lo}=1, \text{Do}=0, \text{Us}=1)) \\
q2 &= \neg(p0 = CS = 0), (p1 = \text{and}(\text{Tr}=0, \text{Mv}=0, \text{Do}=0, \text{Us}=1, \text{Lo}=0, \text{Gl}=0, \text{AC}=0)), \neg(p2 = \text{and}(\text{Tr}=0, \text{Lo}=1, \text{Do}=0, \text{Us}=1)) \\
q4 &= (p0 = CS = 0), \neg(p1 = \text{and}(\text{Tr}=0, \text{Mv}=0, \text{Do}=0, \text{Us}=1, \text{Lo}=0, \text{Gl}=0, \text{AC}=0)), \neg(p2 = \text{and}(\text{Tr}=0, \text{Lo}=1, \text{Do}=0, \text{Us}=1)) \\
q6 &= (p0 = CS = 0), (p1 = \text{and}(\text{Tr}=0, \text{Mv}=0, \text{Do}=0, \text{Us}=1, \text{Lo}=0, \text{Gl}=0, \text{AC}=0)), \neg(p2 = \text{and}(\text{Tr}=0, \text{Lo}=1, \text{Do}=0, \text{Us}=1))
\end{aligned}$$

SET_EXPECTED_AT:

SET_RCHD_AT:

SET_RCHD_EXPECTED_AT:

SET_UNRCHD_AS:

$$q1 = \neg(p0 = CS=0), \neg(p1 = and(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p2 = and(Tr=0, Lo=1, Do=0, Us=1)) \\ q5 = (p0 = CS=0), \neg(p1 = and(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p2 = and(Tr=0, Lo=1, Do=0, Us=1))$$

SET_UNRCHD_EXPECTED_AS:

$$q1 = \neg(p\theta = CS=0), \neg(p1 = and(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p2 = and(Tr=0, Lo=1, Do=0, Us=1)) \\ q5 = (p\theta = CS=0), \neg(p1 = and(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p2 = and(Tr=0, Lo=1, Do=0, Us=1))$$

SET_UNRCHD_AT:

SET UNRCHD EXPECTED AT:

$= CS=0), (p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1))$
 $q4 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1)) - [Be_Activation] \rightarrow q4 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1))$
 $q4 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1)) - [User_Authorized] \rightarrow q4 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1))$
 $q5 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1)) - [Alarm_Deactivation] \rightarrow q5 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1))$
 $q5 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1)) - [Doors_Unlocking] \rightarrow q4 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1))$
 $q5 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1)) - [Doors_Unlocking] \rightarrow q6 = (p0 = CS=0), (p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1))$
 $q5 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), (p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1)) - [User_Unauthorized] \rightarrow q4 = (p0 = CS=0), \neg(p1 = \text{and}(Tr=0, Mv=0, Do=0, Us=1, Lo=0, Gl=0, AC=0)), \neg(p2 = \text{and}(Tr=0, Lo=1, Do=0, Us=1))$

TIME_ATS: 00:00:01.521

TIME_TESTS: 00:00:00.000