|  |  |  |
| --- | --- | --- |
| **Property** | **Output** | **Actions in counterexample/ Example of the trace** |
| AS sh . A s1 . A s2 . (P( true U bcy(s1)) = P(true U bhy(s1))) | False | a\_2=0  a\_12=0  a\_11=0  a\_13=1  a\_6=0  a\_5=0  a\_7=0  a\_10=0  a\_0=0  a\_8=0  a\_3=0  a\_4=0  a\_9=0  a\_1=0  a\_26=0  a\_25=0  a\_24=0  a\_23=0  a\_22=0  a\_21=0  a\_20=0  a\_19=0  a\_18=0  a\_17=0  a\_16=0  a\_15=0  a\_14=0 |
| AS sh . A s1 . A s2 . (P( true U bcy(s1)) > P(true U bhy(s1))) | False | a\_2=1  a\_12=0  a\_11=1  a\_13=1  a\_6=0  a\_5=1  a\_7=0  a\_10=1  a\_0=3  a\_8=0  a\_3=3  a\_4=1  a\_9=0  a\_1=0  a\_26=0  a\_25=0  a\_24=0  a\_23=0  a\_22=0  a\_21=0  a\_20=0  a\_19=0  a\_18=0  a\_17=0  a\_16=0  a\_15=0  a\_14=0 |
| AS sh . A s1 . A s2 . (P( true U bcy(s1)) < P(true U bhy(s1))) | False | a\_2=2  a\_12=0  a\_11=0  a\_13=1  a\_6=1  a\_5=0  a\_7=0  a\_10=0  a\_0=1  a\_8=0  a\_3=0  a\_4=0  a\_9=0  a\_1=0  a\_26=0  a\_25=0  a\_24=0  a\_23=0  a\_22=0  a\_21=0  a\_20=0  a\_19=0  a\_18=0  a\_17=0  a\_16=0  a\_15=0  a\_14=0 |
| AS sh . E s1 . A s2 . (P( true U bcy(s1)) = P(true U bhy(s1))) | True | No counterexample |
| AS sh . E s1 . A s2 . (P( true U bcy(s1)) < P(true U bhy(s1))) | False | a\_2=0  a\_12=0  a\_11=0  a\_13=1  a\_6=1  a\_5=0  a\_7=0  a\_10=0  a\_0=1  a\_8=0  a\_3=1  a\_4=0  a\_9=0  a\_1=0  a\_26=0  a\_25=0  a\_24=0  a\_23=0  a\_22=0  a\_21=0  a\_20=0  a\_19=0  a\_18=0  a\_17=0  a\_16=0  a\_15=0  a\_14=0 |
| AS sh . E s1 . A s2 . (P( true U bcy(s1)) > P(true U bhy(s1))) | False | a\_2=1  a\_12=0  a\_11=1  a\_13=1  a\_6=1  a\_5=1  a\_7=0  a\_10=0  a\_0=3  a\_8=0  a\_3=0  a\_4=1  a\_9=0  a\_1=0  a\_26=0  a\_25=0  a\_24=0  a\_23=0  a\_22=0  a\_21=0  a\_20=0  a\_19=0  a\_18=0  a\_17=0  a\_16=0  a\_15=0  a\_14=0 |
| ES sh . A s1 . A s2 . (P( true U bcy(s1)) = P(true U bhy(s1))) | False | No counterexample |
| ES sh . A s1 . A s2 . (P( true U bcy(s1)) < P(true U bhy(s1))) | False | No counterexample |
| ES sh . A s1 . A s2 . (P( true U bcy(s1)) > P(true U bhy(s1))) | False | No counterexample |
| ES sh . E s1 . A s2 . (P( true U bcy(s1)) = P(true U bhy(s1))) | True | a\_2=0  a\_12=1  a\_11=1  a\_13=1  a\_6=0  a\_5=0  a\_7=1  a\_10=1  a\_0=3  a\_8=1  a\_3=0  a\_4=0  a\_9=0  a\_1=1  a\_26=0  a\_25=0  a\_24=0  a\_23=0  a\_22=0  a\_21=0  a\_20=0  a\_19=0  a\_18=0  a\_17=0  a\_16=0  a\_15=0  a\_14=0 |
| ES sh . E s1 . A s2 . (P( true U bcy(s1)) < P(true U bhy(s1))) | True | a\_2=1  a\_12=0  a\_11=0  a\_13=1  a\_6=1  a\_5=1  a\_7=0  a\_10=0  a\_0=3  a\_8=0  a\_3=0  a\_4=0  a\_9=0  a\_1=1  a\_26=0  a\_25=0  a\_24=0  a\_23=0  a\_22=0  a\_21=0  a\_20=0  a\_19=0  a\_18=0  a\_17=0  a\_16=0  a\_15=0  a\_14=0 |
| ES sh . E s1 . A s2 . (P( true U bcy(s1)) > P(true U bhy(s1))) | True | a\_2=1  a\_12=0  a\_11=1  a\_13=1  a\_6=0  a\_5=1  a\_7=0  a\_10=1  a\_0=3  a\_8=0  a\_3=0  a\_4=1  a\_9=0  a\_1=3  a\_26=0  a\_25=0  a\_24=0  a\_23=0  a\_22=0  a\_21=0  a\_20=0  a\_19=0  a\_18=0  a\_17=0  a\_16=0  a\_15=0  a\_14=0 |