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┌────────────────── MODULE OneBitClock ───────────────────┐
VARIABLE clock

The state predicate Init is true if the value of clock is either 0 or 1.
 $Init \triangleq clock \in \{0, 1\}$ 

The next-state relation Tick sets clock (the value of clock in the next state) to 1 if clock is 0, and
0 if clock is 1.
 $Tick \triangleq \text{IF } clock = 0 \text{ THEN } clock' = 1 \text{ ELSE } clock' = 0$ 

Spec is a temporal formula asserting all behaviours of one-bit clock must initially satisfy Init and
have all steps either match Tick or be stuttering steps. Two such behaviours are:  $0 \rightarrow 1 \rightarrow 0 \rightarrow$ 
 $1 \rightarrow 0 \rightarrow \dots$ 
 $1 \rightarrow 0 \rightarrow 1 \rightarrow 0 \rightarrow 1 \rightarrow \dots$ 
 $Spec \triangleq Init \wedge \Box[Tick]_{\langle clock \rangle}$ 
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\ * Modification History
\ * Last modified Sun Apr 21 10:19:30 PDT 2019 by jasondebolt
\ * Created Sun Apr 21 09:37:13 PDT 2019 by jasondebolt

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