## — MODULE *HourClock* -

EXTENDS Integers  $\begin{array}{l} \text{VARIABLE } hr, \ tmp \\ TmpData \ \stackrel{\triangle}{=} \ (-273 \ldots 1000) \end{array}$ 

 $\begin{array}{rcl} \textit{HCini} & \stackrel{\Delta}{=} & \land \textit{hr} \in (1 \mathrel{.\,.} 12) \\ & \land \textit{tmp} \in \textit{TmpData} \end{array}$ 

 $\begin{array}{ll} \mathit{HCnxt} \; \stackrel{\Delta}{=} \; \wedge \mathit{hr'} \; = \text{if} \; \mathit{hr} \neq 12 \; \text{then} \; \mathit{hr} + 1 \; \text{else} \; \; 1 \\ \; \; \wedge \mathit{tmp'} \in \mathit{TmpData} \end{array}$ 

 $HC \stackrel{\Delta}{=} HCini \wedge \Box [HCnxt]_{\langle tmp, \, hr \rangle}$ 

THEOREM  $HC \Rightarrow \Box HCini$ 

<sup>\*</sup> Last modified Mon Feb 12 15:44:15 CET 2018 by jacob

<sup>\\*</sup> Created Mon Feb 05 14:25:15 CET 2018 by jacob