



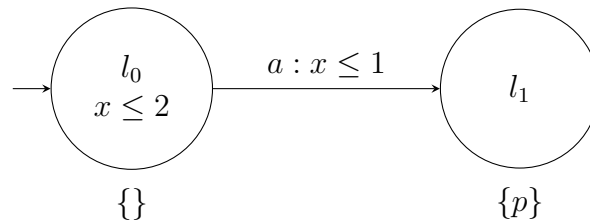
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Tutorial for Cyber-Physical Systems - Hybrid Models

Exercise Sheet 4

Exercise 1: Region Transition System

Consider the following timed automaton \mathcal{T} .



- Provide $RTS(\mathcal{T}, \text{true})$. You can omit unreachable states.
- Is \mathcal{T} timelock-free? If not, how can we recognize a timelock in $RTS(\mathcal{T}, \text{true})$?
- Identify all states of $RTS(\mathcal{T}, \text{true})$ which satisfy the formula $\Phi = \mathbf{A}\mathcal{F}p$.