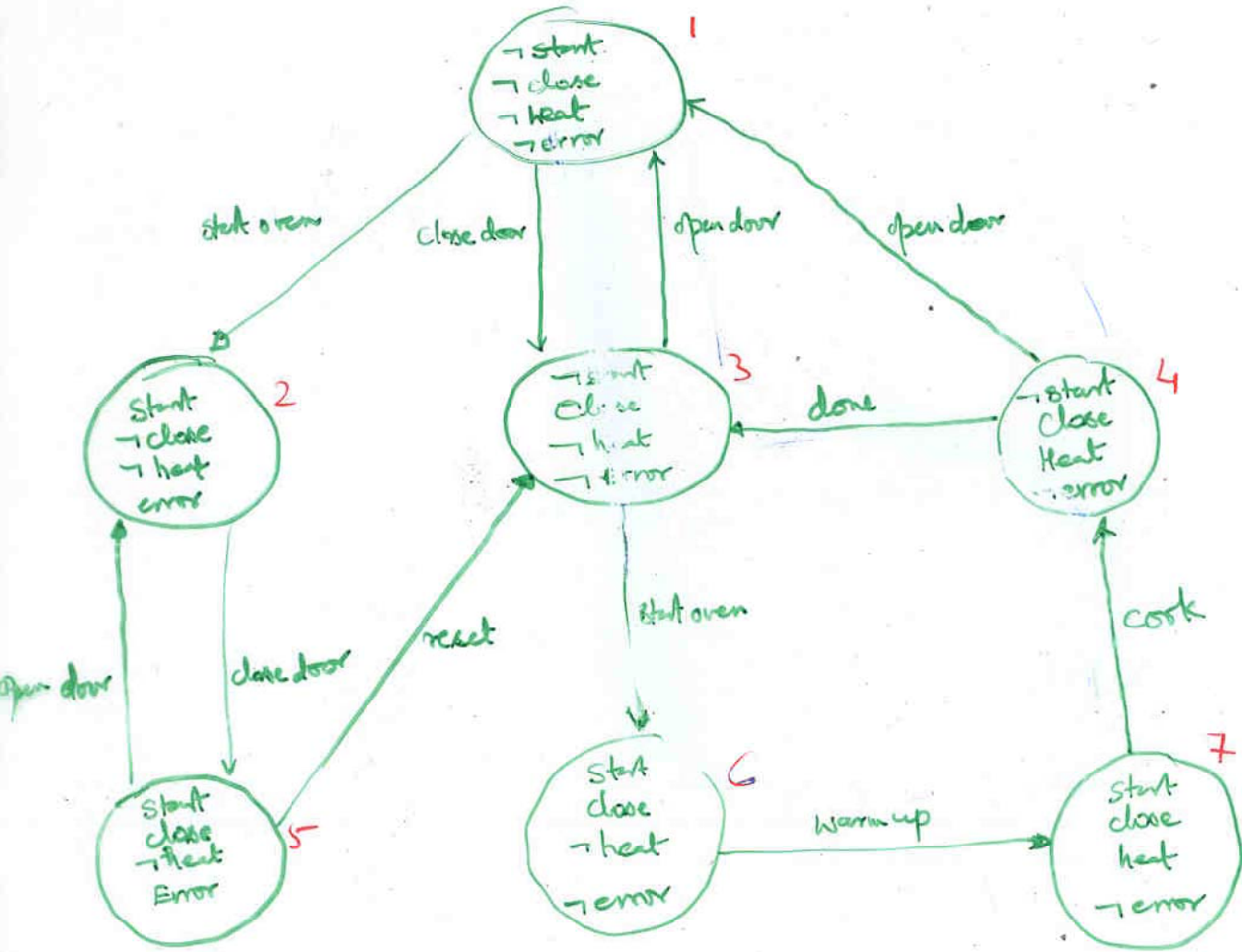


# Example of model checking

- Consider the following state-transition diagram of microwave



spec. For all executions, for all states in the execution of "start" is true, then for all future executions "heat" is true eventually.



Note: transition labels are not relevant

System model,  $M = (S, R, L)$  → set of states  
 → transition relation  $R \subseteq S \times S$   
 → Labeling fn.  $L: S \rightarrow 2^{AP}$