Symbolic Transition Systems in Practice

- States are made up of state variables $v \in V$

  - A state is an assignment to all variables

- A Transition System is $\langle V, I, T \rangle$

  - V: a set of state variables, V' denotes next state variables

  - I: a set of initial states

  - T: a transition relation

    - $T(v_0, \ldots, v_n, v'_0, \ldots, v'_n)$ holds when there is a transition

    - Note: will often still use s to denote symbolic states (just know they're made up of variables)

- Symbolic state machine is built by translating another representation

  - E.g. a program, a mathematical model, a hardware description, etc…