

1 Terminology

block : a set of states, could have a *representative* states.

partition : a set of disjoint block that cover the state-space.

2 Overview

The bisimulation minimization algorithm has 4 steps :

- Start with a sets of bad and good states.
- Break those state into initial partition.
- Compute the equivalence classes inside each partition.
- Use equivalence classes as new state to check.

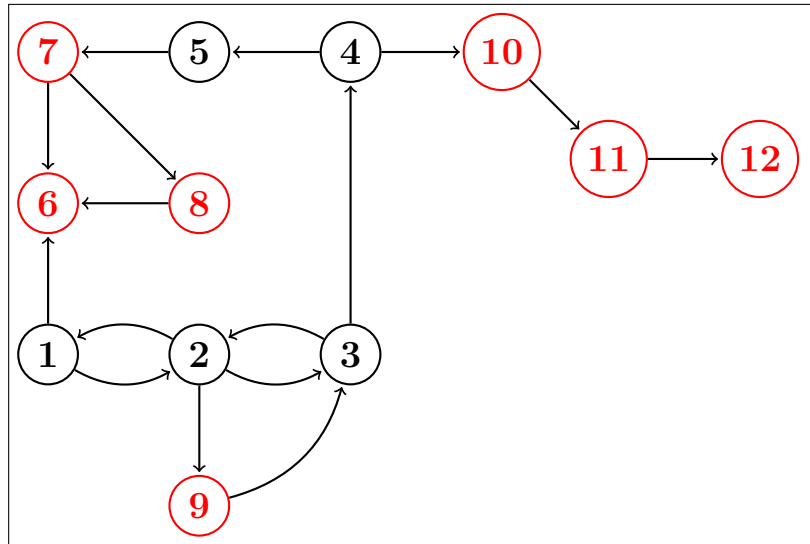


Figure 1: Initial state

3 BFH Algorithm

Like LY, BFH selects reachable blocks to stabilize, but do not stabilize a block the same way as LY.

4 PT Algorithm

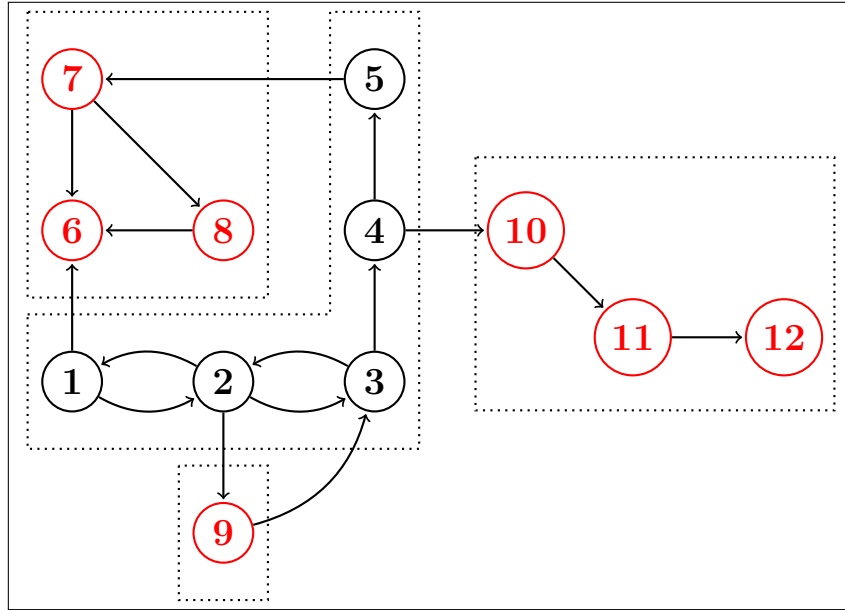


Figure 2: Initial block partition

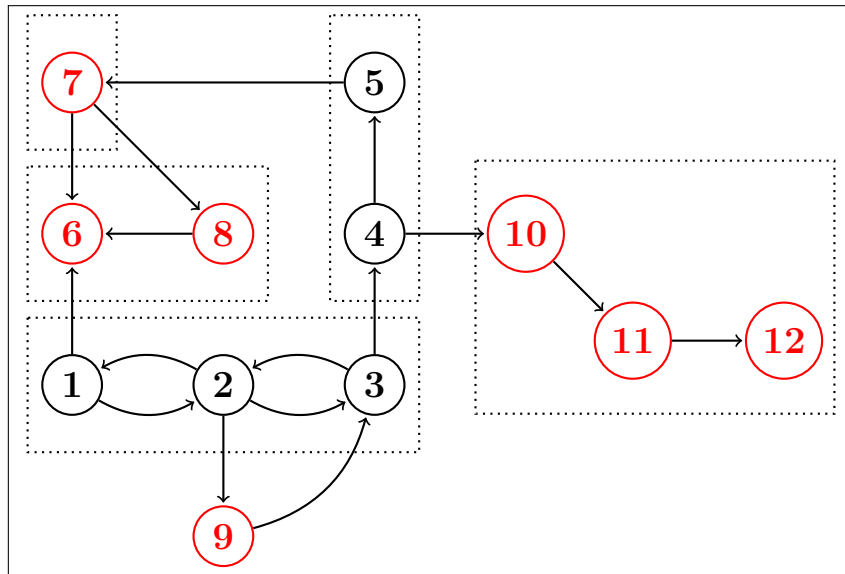


Figure 3: Computation of equivalence classes

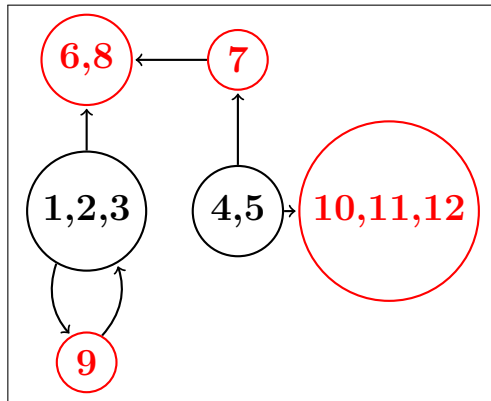


Figure 4: Final system to model-check