## 1. Equivalence Graph

Construct an equivalence graph using Hopcroft's algorithm<sup>1</sup> (its complement, the distinction graph, is shown).

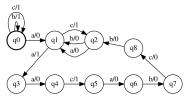


Figure 1: An incompletely-specified FSM

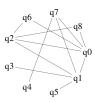


Figure 2: Distinction graph for the FSM in Figure 1

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<sup>&</sup>lt;sup>1</sup>J. Hopcroft. "An  $n \log n$  algorithm for minimizing states in a finite automaton". In: *Theory of machines and computations* (1971), pp. 198 –196.