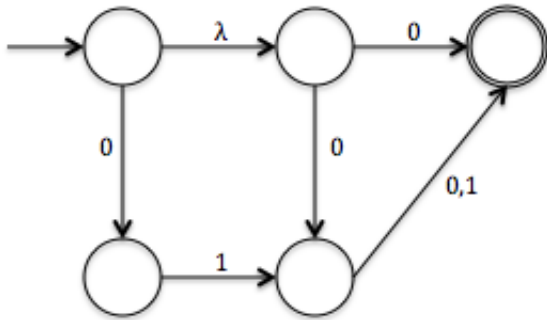


## CSE 311 Quiz Section: November 29, 2012

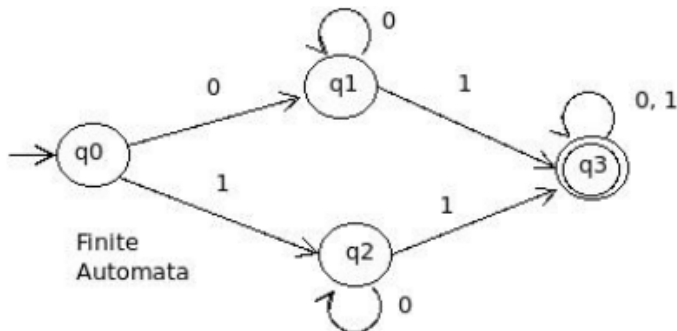
### 1 NFAs to DFAs

Convert the following NFA to a DFA.



### 2 State minimization

Use the state minimization algorithm from lecture to minimize the following finite state machine.



### 3 Regular Expressions to NFAs

Using the constructions given in lecture, find nondeterministic finite-state automata that recognize each of these sets:

- a)  $0^*1^*$
- b)  $(0 \cup 11)^*$

#### 4 FSAs to Regular Expressions

Convert the following DFA to a regular expression.

