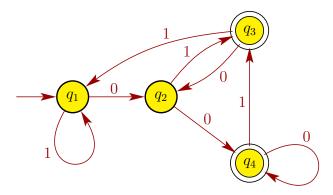
## CS 341, Fall 2014 Solutions for Quiz 1, Day Section

- 1. (a) A is not closed under reversal. For example,  $w = 01 \in A$ , but  $w^{\mathcal{R}} = 10 \notin A$ .
  - (b) A DFA for A is below:



(c) Note that  $C=\{w\in \Sigma^*\mid w=s01 \text{ for some } s\in \Sigma^*\}$ , i.e., strings that end in 01 (and have length  $\geq 2$ , which automatically is true if a string ends in 01). Thus a string-order list of C is  $01,001,101,0001,0101,1001,\ldots$