## 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 $C=\left\{w \in \Sigma^{*} \mid w=s 01\right.$ for some $\left.s \in \Sigma^{*}\right\}$, 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 $01,001,101,0001,0101,1001, \ldots$.
