1. Consider the following FA.

(a) Give two strings of length 4 accepted by the FA.
(b) Give two strings of length 4 NOT accepted by the FA.
(c) Describe in succinct-ish English the language of this FA. Be precise.

2. Use the class algorithm to produce an NFA for the following RE. \((a + bc)^*\)

3. For each language, give 3 strings that are pairwise distinguishable with respect to that language:
   (a) The set of all binary strings whose first and last bit are the same
   (b) The set of all binary strings that contain 101 as substring
   (c) The set of all binary strings of odd length.