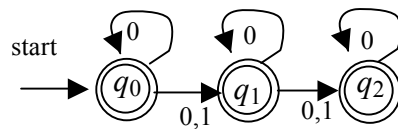# Exercises for FLL, Fall 2018, sheet 2 – Solutions

Return Thursday Sep 20, in class

Note: you may work in teams of 2 if you wish. If you do, hand in a single solution sheet for both of you.

Exercise 1. Design a DFA which accepts the language $L = \{\, w \in \{a, b\}^* \mid |w| > 0,$ *and the last symbol in w is equal to the first*$\}$. Describe your DFA both by a complete transition table and through a graphical transition diagram.

Exercise 2. Describe the language accepted by the NFA shown below in plain English.

Exercise 3. Construct a DFA equivalent to the NFA depicted above, *using the subset construction*. Present your DFA by a transition diagram.