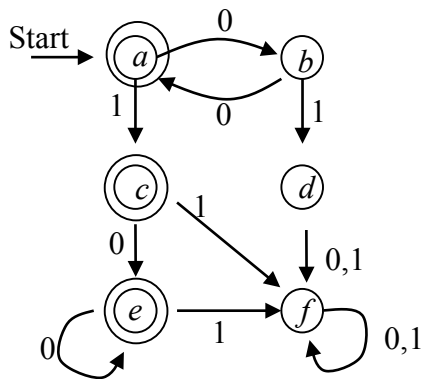


Exercises for FLL, Fall 2018, sheet 4

Return Wed Oct 11, in class. As always you may work in teams of two if you wish – submitting one solution per team with both names on it.

Exercise 1. Minimize the DFA shown in the figure by using the table filling method.

Deliverables: the filling table, the set of states of the minimal DFA, and a graph representation of the minimal DFA.



Exercise 2. Let L be a regular language specified by a DFA, NFA, ϵ -NFA, or regexp. Show that it is decidable whether $L = \Sigma^k$ for some $k > 0$.