

CS 311: Computational Structures

Problem Set 2

James Hook

Prepared: October 4, 2015
Due: October 15, 2015

1. Sipser 1.10 c. star construction of \emptyset .
2. Sipser 1.16 b. NFA to DFA construction.
3. Sipser 1.28 b. Conversion of Regular expression to NFA.
4. Sipser 1.39. Show that for every $k > 1$ there is a language that is recognized by a DFA with k states but not by one with only $k - 1$ states.