

Assignment 3

Automatic Conversion from Regular Expressions to Finite Automata

Due Friday, April 7, 2017

1. (10%) Construct the expression tree for the following regular expression
 $(a \mid b)^* a \mid a^* b$
2. (40%) Construct a nondeterministic finite automaton (NFA) for the regular expression using the Thompson's construction algorithm.
3. (50%) Convert the NFA into a deterministic finite automaton (DFA) using the subset construction algorithm.

To turn in this assignment, upload a pdf file hw3.pdf that contains the solutions for this assignment to the eCourse site.