## **Assignment 2**

## **Automatic Conversion from RE to FA**

## Due October 19, Thursday, 2017

- 1. Consider the following regular expression a b a |  $b^*$  a  $(\varepsilon | b)$ .
  - (a) (50%) Construct the nondeterministic finite automaton for the regular expression using the Thompson's construction algorithm.
  - (b) (50%) Convert the nondeterministic finite automaton in problem (a) into a deterministic finite automaton using the subset construction algorithm.

To turn in this assignment, upload a pdf file hw2.pdf that contains the solutions for this assignment to the eCourse site.



