CS 4453 Fundamentals of Automata and Formal Language Theory
Spring 2016

Lab Assignments
Due April 20, 2016

1. Write a program that accepts two DFAs, M_1 and M_2, as input and generates a state table for the DFA $M_1 \cup M_2$
   - Look at Example 3 from Lecture 3 (Slide 26)

2. Write a program that accepts an NFA M_1 as input and generates a state table for a DFA M_2 equivalent to M_1
   - Look at Example 8 from Lecture 3 (Slides 38 and 39)
   - No more than 5 states for the input NFA.

3. Write a program that converts a DFA to a GNFA. Do not include pairs of states without transitions into the transition table of the resulting GNFA.
   - Look at the algorithm and examples in Lecture 5

4. Write a program to convert a GNFA to a Regular Expression.
   - Look at examples in Lecture 5