CIT 596 Recitation, Week 4

Honglin Zhang

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[Exercise] @sipser13 [p. 86] exercise 1.19

Convert the following regular expressions to nondeterministic finite automata. Then convert the NFA to a DFA. Eventually, convert the DFA to a GNFA and compare the regular expression derived from GNFA with the given. In all parts, $\Sigma = \{0, 1\}$.

- $(0 \cup 1)^*000(0 \cup 1)^*$
- $(((00)^*(11)) \cup 01)*$

[Exercise] @sipser13 [p. 90] exercise 1.45

- Let $A/B = \{w | wx \in A \text{ for some } x \in B\}$. Show that if A is regular and B is any language, then A/B is regular.