<u>Homework #2- due April 12, 2006</u>

1. Linz, Section 1.2: 11(b), 14(c), 18(b)
                2.1: 2(a), 5(b), 9(g)

2. Let M be the dfa in file JHW1 and let $L = L(M)$.
    - (a) Give a description of L in set notation.
    - (b) Modify M by making the state q1 non- final and q2 final.
      What language does the modified dfa accept? Describe the language in set notation.
    - (c) Modify M so that it accepts L^2 .

3. Let M be the dfa in file JHW2. Modify M so that it accepts $L(M) \cup \{a\}$.

Note: Please hand in JFLAP files for problems 2(c) and 3.

Use the handin utility on CSIF for electronic submission:

For example, if you're submitting the file "problem_2c.jff" as part of homework #2, use the following command on your CSIF account:

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> handin shini hw2 problem_2c.jff
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