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# PROBLEM SET 1

## CS 373: THEORY OF COMPUTATION

Assigned: August 29, 2013    Due on: September 5, 2013

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**Instructions:** This homework must be solved **individually** on [www.automatatutor.com](http://www.automatatutor.com) and the solutions will be graded automatically by the tool.

**Recommended Reading:** Lectures 1 and 2 and website <http://www.automatatutor.com>

In this homework assignment you are required to use the tool AutomataTutor to draw Deterministic Finite Automata (DFAs) for various languages.

To access the homework:

1. go to [www.automatatutor.com](http://www.automatatutor.com); please use either **Chrome** or **Safari**
2. sign up with your Illinois email (`<netid>@illinois.edu`);
3. on the left tab click on
  - (a) *Practice*: these exercises are to help get familiar with the tool and do not contribute to the final grade.
  - (b) *Homework Part A*: this section has 4 problems that must be solved. You can attempt these problems multiple times, and use the feedback from the tool to fix your solution to your satisfaction.
  - (c) *Homework Part B*: this section contains one problem that can be attempted only once.

### Part A: Problems with Multiple Attempts

Click on Homework Part A. You can attempt these 4 problems multiple times and your grade will be computed as follows. For each problem you will receive: 0.5 point for trying the problem at least once, and an *additional* 1 point for successfully solving the problem.

4 problems (1.5 points each, 6 points total)

### Part B: Problem with Single Attempt

Click on Homework Part B. You will only see one problem. You can attempt this problem only *once* and you will receive up to 4 points based on the quality of your solution.

1 problem (4 points total)