Today Finite-state automata. § 1.1, 1.2.
Next class Regular expressions, equivalence to FSAs, nonregular languages. § 1.3, 1.4.

1. List the members of your group below. Underline your name.

2. Provide a formal description of the automaton $M_4$ from page 38 of the textbook, using the description on page 36 as a guide.

3. Trace the action of the automaton of Question 2 on the following strings by annotating each character of each string with the corresponding state of the automaton.
   
   (a) abbaababa
   (b) bbbabaaab
   (c) bbbabaaba
4. Design an DFA that accepts integer literals in Java syntax. Explain how your DFA works.

5. Provide an NFA and a DFA for the language of binary strings whose fourth-last character is a 1. Explain briefly.