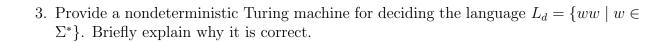
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**Today:** NP-complete problems. §7.5. **Next class:** Space complexity. Ch. 8.

- 1. List the members of your group below. Underline your name.
- 2. Reduce the following 3SAT instance to an instance of HAMPATH by using the text-book's method:  $(x \lor y \lor \bar{z}) \land (\bar{x} \lor \bar{y} \lor z) \land (x \lor \bar{y} \lor z) \land (\bar{x} \lor \bar{y} \lor \bar{z})$

Is the 3SAT instance satisfiable? If so, depict corresponding solutions of the 3SAT and HAMPATH instances. Otherwise, explain why neither instance has a solution.



4. Reduce to problem of determining whether the machine of Question 3 accepts a string x to SAT using the textbook's method.