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Today Decidability. § 4.\*. Next class Review. HW02 due. Midterm Exam 1 on 2014-02-18.

- 1. List the members of your group below. Underline your name.
- 2. Prove or disprove: The set of infinite strings over the alphabet  $\{a, b, c\}$  is countable.

3. Prove or disprove: The set of three-dimensional integer lattice points is countable.

4. Prove or disprove: The set of all syntactically correct Python programs is countable.

5. Prove or disprove: The language of context-free grammars that generate the empty string is decidable.

6. Prove or disprove: The set of strings that are *Python* programs that each output 0 for all inputs is a decidable language.