CSE 200
Computability and Complexity
Homework 1
Models of Computation and Undecidability
Due Monday, April 24

April 3, 2006

1. In your favorite programming language, write a program that takes no input and prints itself (its own code). Your program may not make system calls.
2. Problem 3.11 from textbook, page 161.
3. Problem 3.15, all parts.
4. Show that P, the class of problems decideable in polynomial time, is also closed under all the operations from Problem 3.15.
5. Consider the language of palindromes, binary strings that are the same when reversed. Prove that a 2-tape Turing Machine can recognize this language in linear time.