600.363/463 Algorithms
Assignment 5
Due October 21, 2013

I. A *restricted common subsequence* of two strings is a common subsequence in which no two consecutive symbols are equal. Design a dynamic programming algorithm which computes the longest restricted common subsequence of any two given strings. What is its speed? Pseudo code is not needed. Even if you specify the pseudo code, you need to provide an informal description of the algorithm.

II. Design a bottom-up algorithm for inserting a new number into a 2-4 tree. You need to explain the algorithm graphically and highlighting the tree rotations. What is the speed of the algorithm?