Assignment #5:

Due Date: July 1

1. Exercise 15.2-1
2. Consider the activity selection problem discussed before but with profits. Activity i $(= 1, 2, ..., n)$ has three values associated with it. s_i the start time, f_i the finish time and p_i the profit. We want to select a subset of nonoverlapping activities whose total profit is maximum. Show how to use dynamic programming to solve this problem.
3. Given a string $A[1, 2, ..., n]$ of numbers, find a subsequence $B[1, 2, ..., m]$ with $B[i] < B[i + 1]$ for $i = 1, 2, ..., m - 1$ such that the value of m is maximum.
4. Problem 15-6
5. 16.2-2