

Assignment 4

CPS 616
Winter 2021
Friday March 12
Deadline: Friday, March 19, 6pm

The assignment must be submitted by the deadline. For each hour the assignment is late, 4.16% of the overall mark will be deducted. For instance, if the assignment is submitted 2 hours late, the maximum achievable mark will be $(100 - 2(4.16)) = 91.68\%$.

You are free to discuss the assignment with your classmates, but you are responsible for understanding the solution and you must write down the answers in your own words. You must provide the names of the individuals you collaborated with at the top of your submitted assignment.

1. Given a sorted array, the goal is to find the smallest missing element in the array using Divide and Concur approach. All elements of the array are non-negative, and non-equivalent integers. [5 marks]
2. Solve 0-1 knapsack problem using dynamic programming. [10 marks]