Homework 3, Due day: March 2

All solutions should be typed, using Latex preferably (suggested to use Overleaf software).

(1) For the weighted interval schedule problem shown in the class notes, suppose the weight values for a, b, c, d, e, f, g, h are 24, 20, 15, 13, 2, 6, 4, 3, respectively. Run the memorization version of the algorthms and show all intermediate results. Print out the final solution by running find-solution.

(2) Find an optimal parameterization of a matrix-chain product whose sequence of dimensions is {5x12, 12x4, 4x12, 12x5, 5x45, 45x6}. Show all details of the dynamic programming solution by including all subproblem values.

(3) Chapter 6.2

(4) Chapter 6, 9

(5) Chapter 6, 21

(6) Chapter 6, 24