Approximation Algorithms Programming Hw 2

Q1. In this question you are requested to implement dynamic programming algorithms in C language. Please implement weighted interval scheduling algorithm (memoization version), knapsack algorithm (bottom-up version) and RNA secondary structure (bottom-up version) algorithm (Algorithms are given in your course book and slides). Show that your code runs correctly by varying inputs (such as input sizes).

Q2. Choose a problem above and implement a brute-force algorithm to solve that problem. First show that your code runs properly. Please provide a performance evaluation to compare the brute-force algorithm with the dynamic programming algorithm.

Please provide a report related to your homework. In your report, please explain your findings with necessary screenshots from your programs.

Deadline: 30.December.2018, 23:59

Submission: Please send your homework (report and source codes) to these e-mails:

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