

## Report for Programming Problem 2

### Team:

Student ID: \_\_\_\_\_ Name \_\_\_\_\_

Student ID: \_\_\_\_\_ Name \_\_\_\_\_

### 1. Algorithm description

(Describe the main working principles of your approach to the problem – give pseudo-code or a textual explanation. Identify the overlapping sub-problems that you considered for your dynamic programming approach. Explain speed-up tricks that you have considered to improve the efficiency of your approach.)

### 2. Data structures

(Describe the main data structures that you have used in your approach.)

### 3. Correctness

(Justify why your approach is correct in case you achieved 200 points, or if you got a “Time Limit Exceeded” verdict but believe that despite that it is correct. In particular, you should discuss the optimal substructure property of the problem used by your approach. In case you got “Wrong Answer” or “Time Limit Exceed” in some cases, explain why this happened and what could have been done to improve your approach.)

### 4. Algorithm Analysis

(Discuss the overall memory and time complexity of your approach.)

### 5. References

(Provide all the bibliography and internet links that you have used to support the development of your approach.)