Class – List 08a

Introduction.

Tasks after lecture about fundamental techniques.

Task List

All next problems are from https://icpcarchive.ecs.baylor.edu/index.php. Then choose links: "Browse Problems" -> "ICPC Archive Volumes" -> then volume XYZ has problems with numbers from XYZ*100 to XYZ*100+99. Prepare a method in which as argument are just read to some collection. E.a. for "Lollies" it can be a two arrays (for number of lollies and delays), or an array of objects from class DayOfCalendar (e.a. with two fields lollies and delay).

1. Propose an algorithm to solve the problem specified below using **greedy algorithm**. Propose an efficient implementation of the algorithm.
    a. 3004 - Change
    b. 2535 - Magnificent Meatballs
    c. 2326 - Moving Tables
2. Propose an algorithm to solve the problem specified below using **dynamic programming**. Propose an efficient implementation of the algorithm.
    a. 2487 - Lollies
    b. 3390 - Pascal's Travels
    c. 3144 - Lenny's Lucky Lotto Lists
3. Propose an algorithm to solve the problem specified below using **"divide & conquer"**. Propose an efficient implementation of the algorithm.
    a. 2122 - Recognizing S Expressions