PL03

Due Feb 7, 2019 by 3pm **Points** 10 **Submitting** a file upload **File Types** zip
Available Feb 5, 2019 at 3pm - Feb 7, 2019 at 3pm 2 days

This assignment was locked Feb 7, 2019 at 3pm.

Study Chapter 3 "A Bag Implementation That Links Data" and Chapter 4 "The Efficiency of Algorithms".

Enter at least one interview question into the bank of "Interview Questions" - use your alias instead of your name. Find a question on the internet that pertains to any topic that we studied in this class.

IN PREPARATION FOR THE LAB:

- Study the provided `BagInterface` and the methods implemented in the `LinkedBag`
- For the following methods that you are to implement in `LinkedBag.java` for Project3 of Lab03: `equals, getMax, removeMin, removeEvery, union, intersection, difference, moveFirstToEnd, replace, findMiddleElementInOnePass, checkIfLoopExists`
  - provide an algorithm in pseudocode
  - draw memory diagrams showing how the respective bags will look like as the result of the given method call - use the scenarios from the main.
- Using Big Oh notation, indicate the time requirement of each of the following tasks in the worst case. Describe any assumptions that you make:
  a. After arriving at a party, you shake hands with each person there
  b. Each person in a room shakes hands with everyone else in the room.
  c. You climb a flight of stairs
  d. You slide down the banister
  e. After entering an elevator, you press a button to choose a floor
  f. You ride the elevator from the ground floor up to the nth floor
  g. You read a book twice