ITRW222

KLASTOETS 4B /CLASS TEST 4B

15 Aug. 2017

Naam / Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Assume the following code exists: / Aanvaar die volgende kode bestaan:

public class UOA<T>

{ private int next; // equal to the index of the first open space in the array

private T[] data;

private int size;

….

}

In the client class:

public int compareTo(Object targetKey)

Ontwerp ’n metode vir die klas UOA genaamd: *largestLast (),* wat die grootste element (volgens waarde) laaste in die skikking sal plaas. Die huidige laaste element moet met die grootste element omgeruil word.

* 1. Teken ‘n diagram om die problem te demonstreer.
  2. Skryf die algoritme in jou eie woorde vir die algemene geval.
  3. Wat is die spesiale gevalle (uitsonderings) en hoe moet dit hanteer word?
  4. Gee die Java kode vir die metode.

Design a method for the class UOA called: *LargestLast*(), that will put the largest element (according to value) last in the array. The current last element should be swapped with the largest element.

* 1. Draw a diagram to demonstrate the problem.
  2. Write the algorithm in your own words for the general case.
  3. What are the special cases (exceptions) and how should it be handled?
  4. Give the Java code for the method.