

PL06

Due Feb 28, 2019 by 3pm **Points** 10 **Submitting** a file upload **File Types** zip
Available Feb 26, 2019 at 3pm - Feb 28, 2019 at 3pm 2 days

This assignment was locked Feb 28, 2019 at 3pm.

Study Chapter 8 "An Introduction to Sorting"

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:

- Load the Lab6 java files and analyze the code provided.
- Make yourself familiar with the tasks that you need to implement in the lab
- Show contents of the array of integers 5 7 4 3 9 8 5 6 **each time a given sort changes it** while sorting the array into ascending order
 1. apply *selection sort* algorithm
 2. apply *insertion sort* algorithm
 3. apply *improved shell sort* algorithm (as shown in Lecture Notes)
 4. apply *bubble sort* algorithm (as described in exercise #8 on page 216)
 5. apply *improved bubble sort* algorithm (as described in exercise #10 on page 216)
 6. apply *shaker improved bubble sort* algorithm (as described in the lab description)
- Open `ChainSort.java` provided in the Lab06 package and see how the `Node` class is defined there:
 1. draw a chain of nodes with the following seven elements: 40 7 33 55 11 68 38
 2. show how the `previous` pointer is going to be used by the *shell sort* algorithm
 3. trace the *shell sort* algorithm on paper (step by step until the elements are sorted) - remember to only replace appropriate data without changing the `next` pointers
- Run sorting applets (see Lecture Notes)