

Assignment 1 (mandatory)

Sorting Shakespeare's complete works

Jacob Trier Frederiksen (JTF, teacher)
& Anders Kalhauge (AKA, assisting)

Algorithms & Data Structures, Spring 2019

We want Shakespeares complete works, sorted by word. Meaning that “to be or not to be, that is the question” would be sorted as: “be be is not or question that the to to”.

You'll find the complete works in the [GitHub course repository under Weeklies](#).

You will work in groups of three to create a Java program, that can:

- Read any text file (as the above, Shakespeare-one, into an array or ArrayList)
 - All words should be lower case
 - No punctuations - strip commas, full stops, etc.
- Sort the array using different sorting algorithms:
 - Selection Sort
 - Insertion Sort
 - Merge sort
- Be extendable to application of other sorting algorithms in the future.
- Measure time consumption for each algorithm and compare them, and discuss the results in a one-page summary.

The solution accompanied with a description in a text file should be uploaded to the [Peergrade course website](#), no later than Tuesday February 15th, 08:30.