

Assignment #2 - Searching Shakespeare's complete works

Algorithms and Datastructure

Marjahan Begum and Jens Egholm Petersen

Spring 2017

In groups:

We want the words of Shakespeares complete works, saved in a Symbol table. The words should be keys and the values should be the number of occurences in the text. Meaning that “to be or not to be, that is the question” would be saved as:

{(to → 2), (be → 2), (or → 1), (not → 1), (that → 1), (is → 1), (the → 1), (question → 1)}.

You can find the complete works here:

[https://github.com/cphbus-algorithms/general/
tree/master/assignments/01%20Shakespeare/shakespeare-complete-works.txt](https://github.com/cphbus-algorithms/general/tree/master/assignments/01%20Shakespeare/shakespeare-complete-works.txt)

You shall in groups create a Java programs, that supports the folowing implementations of Symbol tables:

- **LinkedSymbolTable** using a linked list-based Symbol table.
- **ArraySymbolTable** using an array-based Symbol table.
 - Use your **FlexibleArray** class
- **HashedSymbolTable** using a hashing strategy.
- **BalancedTreeSymbolTable** using a balaced tree as 2-3 or red-black
- measure the time used for each algorithm

The solution accompanied with a description in a README.md file should be uploaded (pushed) to a git repository, and a linked should be send to MBEG **and** AKA, no later than Wednesday March 1. 12:00.