Assignment 2 (mandatory)
Searching Shakespeare's complete works

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We would like the words of Shakespeare's complete works, saved in a Symbol table. The words should be keys and the values should be the number of occurrences in the text. This, meaning that: "`to be or not to be, that is the question`" would be saved as:
$\{(\text{to} \rightarrow 2), (\text{be} \rightarrow 2), (\text{or} \rightarrow 1), (\text{not} \rightarrow 1), (\text{that} \rightarrow 1), (\text{is} \rightarrow 1), (\text{the} \rightarrow 1), (\text{question} \rightarrow 1)\}$.

You will again find the complete works of Shakespeare – rather impressive for his time – in the GitHub course repository under The Weeklies (week 5).

Work with your groups to create a Java program, that supports the following implementations of Symbol tables:

- `LinkedSymbolTable` using a linked list-based Symbol table.
- `ArraySymbolTable` using an array-based Symbol table.
  - Use your `FlexibleArray` class, from classroom exercises
- `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 text file should be uploaded to the Peergrade website, no later than Tuesday February 26$^{\text{th}}$, 08:30. Please ask if you are in doubt about this.