Mini Project #1 - Sorting Shakespeare's complete works
Algorithms and Data Structures

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This is the first of five mini projects - mandatory assignments.

In groups:

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 can find the complete works here:

`https://github.com/datsoftlyngby/soft2020spring-alg/tree/master/data`

You shall in groups create a program[1], that can

- read any textfile (as the above) into an `array` or `List`[2]. The content should be sanitized:
  - All words should be lower case
  - No punktuations - strip commas, full stops, etc.
- sort the array using different sorting algorithms:
  - Selection Sort
  - Insertion Sort
  - Heap Sort

  - Merge Sort
  - Sorting using a Trie

- be extended with other sorting algorithms in the future.
- messure and log the time used for each algorithm as a function of the file size in words.

The solution accompanied with a description in a README.md file should be uploaded (pushed) to a git repository.

This Mini Project will require knowledge from lectures to come.

A link to the repository shal be uploaded to peergrade no later than March 11th 2020.

Notes

[1]You can choose freely between all human readable programming languages, but it is not allowed to use the build-in sorting functionallity of the language.

[2] depending on the language chosen