Runsort

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1 Runsort Report

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1.1 Tests

We have run our sorting algorithm on the following inputs from the book; all were sorted: `tiny.txt`, `words3.txt`. Furthermore, we have run our sorting algorithm on a custom input file `mega.txt`, consisting of 100.000 randomly genereated letters.

We also ran our sorting algorithm on `numbers.txt` (included). The algorithm fails on this input, but we cannot find the error in our code. The algorithm seems to sort on the first digit in the number and not the number as a whole.

1.2 Extension

The two figures below shows a visual trace of runsort, given the inputfile tiny.txt: The plotbars are illustrated using the `StdStats.plotBars` method from the book. Furthermore, we are using the `Thread.sleep` method, to set a delay of the drawing, so it's possible to view the visual trace of our algorithm.
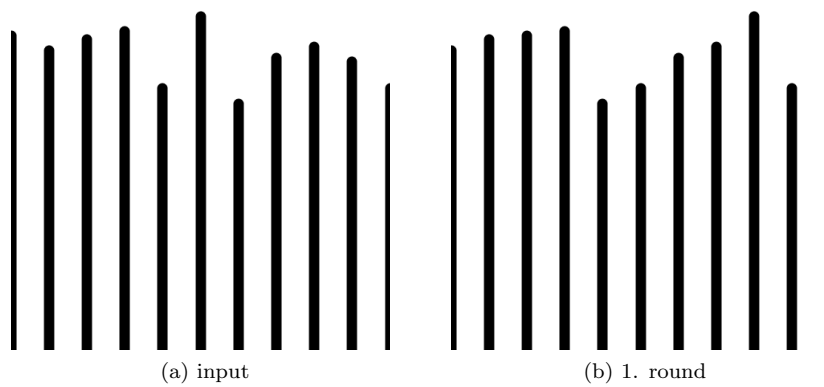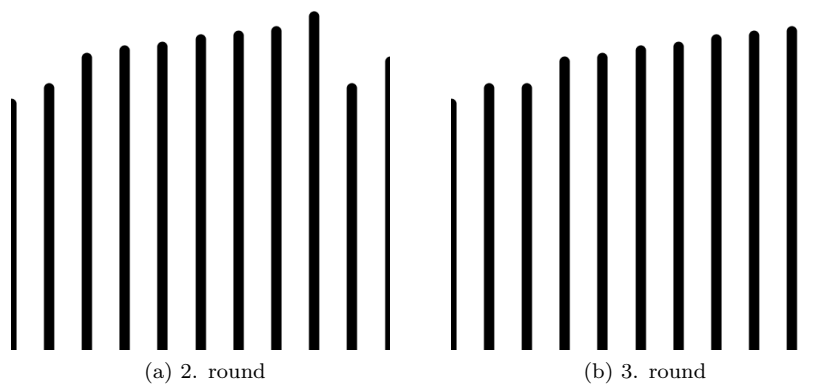
(a) input (b) 1. round

Figure 1

(a) 2. round (b) 3. round

Figure 2

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