

Runsort Report

Tests

The sorting algorithm was run on the following inputs, all were sorted: TinySort.txt, Words3Sort.txt, OneSort.txt, HugeSort.txt. The text files are included in the hand-in (see “data” folder). TestTiny and TestSmall tests on codeJudge were solved correctly by using both RunSort2 and FancyRunsort2.

Extensions

Our implementation includes the “Mirror Down-Runs” extension. To test the running time of Runsort2 and FancyRunSort2 we used the files HugeSortDesc.txt (size: 1,000,000) and MediumSortDesc.txt (size: 10,000), which contain long descending runs. There is no significant difference in running time between the two implementations:

	<i>RunSort2</i>	<i>FancyRunsort2</i>
1,000,000 random	0.727	0.841
10,000 random	0.092	0.091
1,000,000 descending runs	0.726	0.717
10,000 descending runs	0.108	0.078