

Algorithms and Complexity I Homework 2

Please implement Quicksort, Randomized Quicksort and Heapsort algorithm in C. Please take these measurements for two setups below:

Setup 1. Please measure the run time and total number of comparisons (“if” comparisons). Please take your measurements for 1 KB, 256 KB, 512 KB and 1 MB list sizes. In order to obtain reliable measurements please repeat each measurement for 5 times and take the average.

Setup 2. Repeat the Task 1 for reverse sorted lists.

Please prepare a detailed report including these items:

- Comments for your C codes.
- After obtaining measurements please plot related graphs and comment on measurements.
- Compare the performance of algorithms.

Your homework should include both C codes and your report.

Deadline: 2 November 2012, 23.59

Submission: Please send your homework to these e-mails:

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