

CH08-320143: Assignment #6

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1 BONUS

1.1 Performance (BONUS)

When we come down to comparing the two variants of Heap Sort, we get the following approximate table

$sizeof(n)$	Heap Sort	Heap Sort Variant
1000	0.00022	0.000187
10000	0.00197	0.001826
100000	0.02149	0.021038
1000000	0.24785	0.274699

As evident from the table above, as the size of the input array increases, the run time of the algorithm also increases. For smaller input sizes, the algorithm tends to run quicker. The algorithm has been timed using the `<ctime>` library from C.

All necessary files for this assignment are included in the root directory of this submission.