

Report: Short Project 1

Binhan Wang*, Hanlin He†, Zheng Gao‡

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1 Merge Sort

Running time of generic merge sort, int merge sort and nSquareSort on array with size from 1 million to 16 million is listed in table 1, all running time are in milliseconds.

Table 1: Running Time Comparison

Array Size	Generic Merge Sort	Int Merge Sort	N-Square Sort
1M	332	152	1303924
2M	779	315	5596480
3M	1189	501	11571927
4M	1631	659	22787616
5M	2117	836	33913957
6M	2614	1022	49299890
7M	3070	1202	62519820
8M	3447	1369	80586296
9M	4145	1550	106351047
10M	4560	1763	138835814
11M	5268	1941	151956006
12M	5606	2122	205003230
13M	6168	2311	236216225
14M	6735	2483	242334996
15M	7406	2656	∞
16M	7848	2909	∞

*bxw161330@utdallas.edu

†hxx160630@utdallas.edu

‡zxx170430@utdallas.edu