

N = 1400	Bubble	Selection	Insertion	Quick	Merge	Tree	Heap	sort
N	4.86	1.69	2.98	.58	.48	.43	.64	0.00
2N	39.16	10.99	26.85	1.16	.89	.58	1.14	0.00
4N	507.16	122.12	342.58	3.83	1.91	1.04	3.28	0.02
8N				14.71	4.51	2.36	10.62	0.03
16N				72.91	10.51	5.12	46.56	0.05

(All sorts are correct)

The data indicates that the ranking should be

1. Tree
2. Merge
3. Heap
4. Quick
5. Selection
6. Insertion
7. Bubble

Getting values of 8N and 16N for the  $n^2$  searches would take too long > 30 mins so I did not collect those values. The Linux sort command far outpaced the other sorts in the competition. The  $n^2$  searches, while slow, are easy to implement and understand and tree sort, which has the most challenging implementation was the fastest to run. Generally, the faster  $n\log(n)$  sorts were much harder to implement and understand.