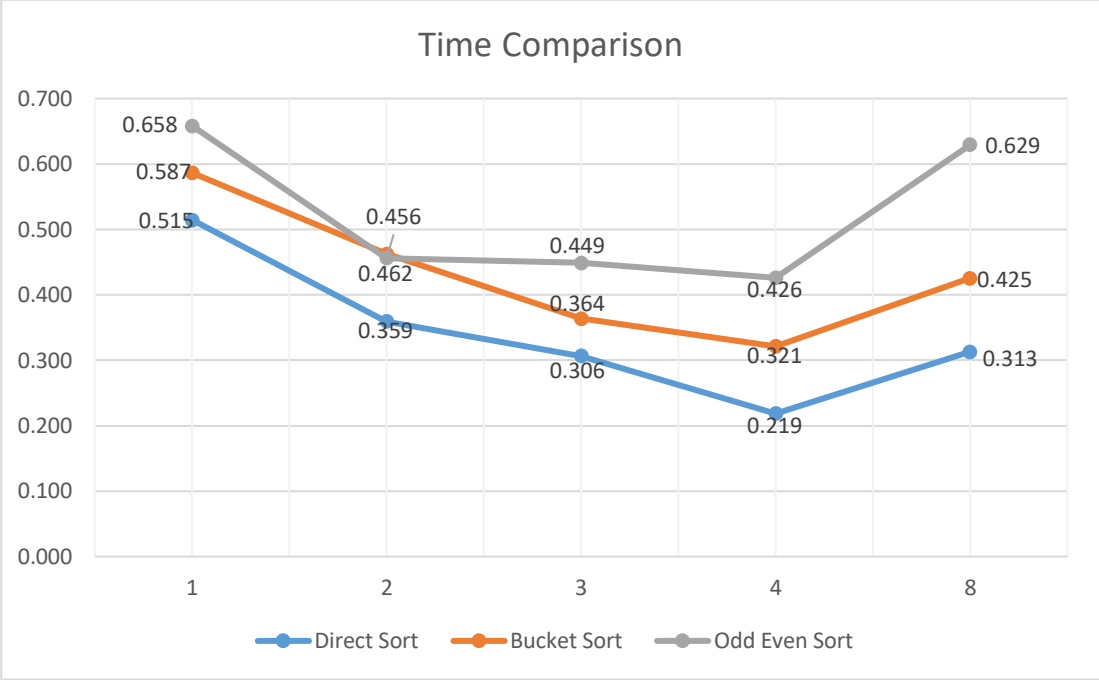
Execution Times

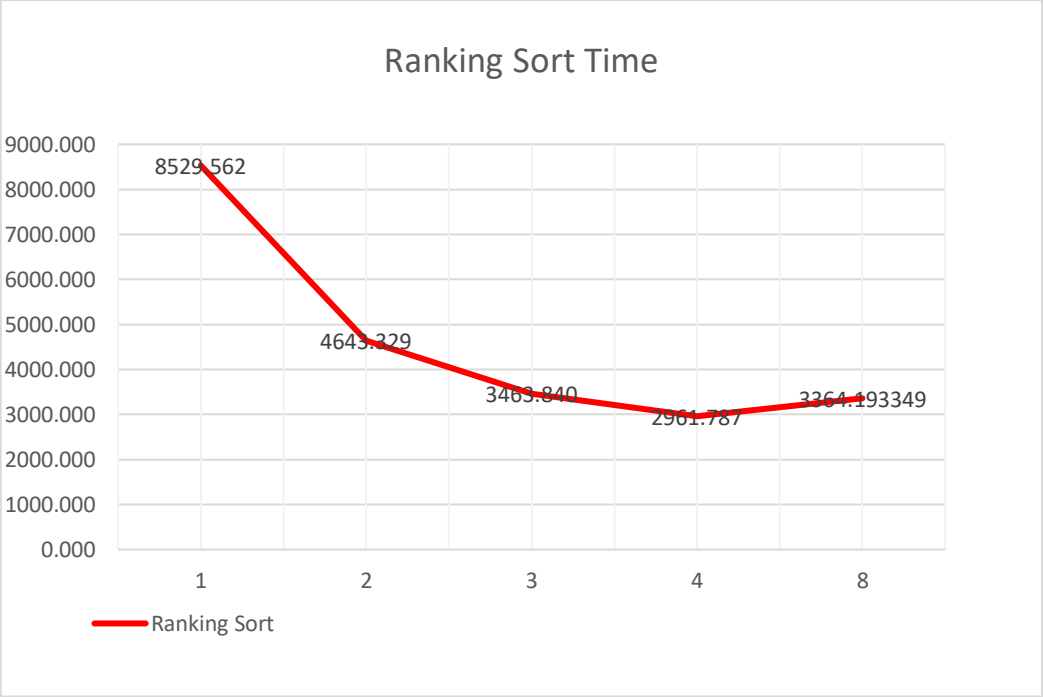
Oversubscribe

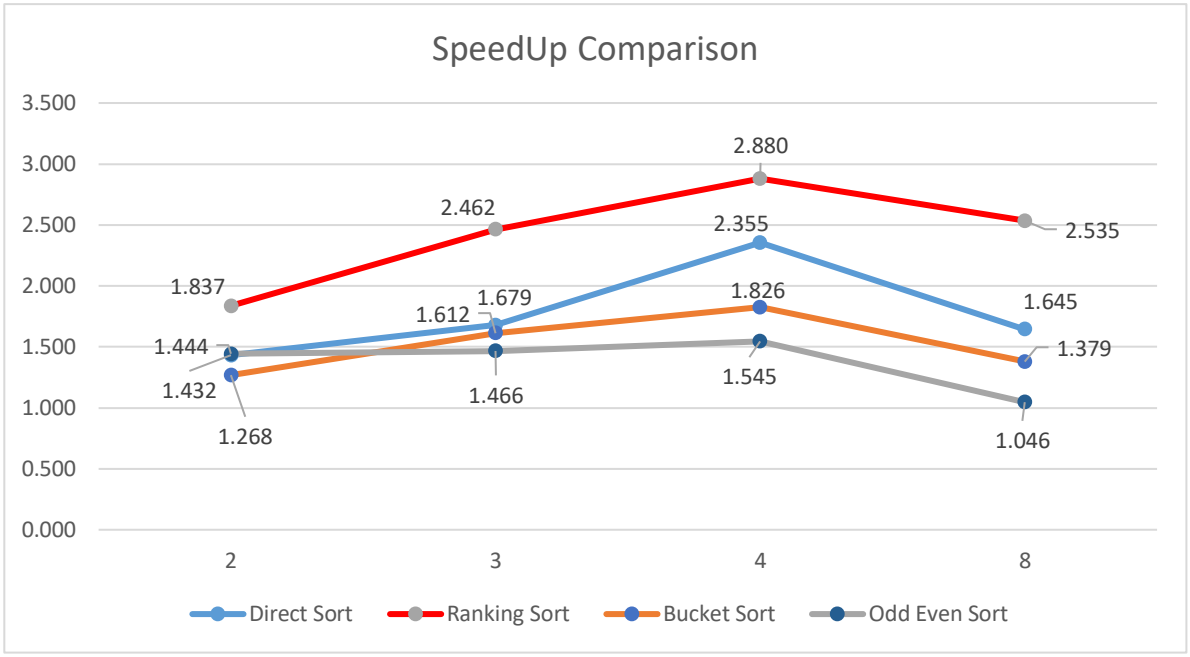
No Procs	No Elems	Direct Sort		Ranking Sort		Bucket Sort		Odd Even Sort	
		Proc Idex	Time(s)	Proc Idex	Time(s)	Proc Idex	Time(s)	Proc Idex	Time(s)
8	1,000,000	Proc0	0.252	Proc0	3364.105	Proc0	0.296	Proc0	0.540
		Proc1	0.197	Proc1	3359.762	Proc1	0.374	Proc1	0.607
		Proc2	0.294	Proc2	3361.686	Proc2	0.414	Proc2	0.614
		Proc3	0.283	Proc3	3361.677	Proc3	0.405	Proc3	0.607
		Proc4	0.312	Proc4	3364.177	Proc4	0.400	Proc4	0.624
		Proc5	0.299	Proc5	3362.256	Proc5	0.425	Proc5	0.617
		Proc6	0.313	Proc6	3364.189	Proc6	0.399	Proc6	0.629
		Proc7	0.300	Proc7	3364.193	Proc7	0.412	Proc7	0.610
		MAX	**0.313**	**MAX**	**3364.193**	**MAX**	**0.425**	**MAX**	**0.629**
4	1,000,000	Proc0	0.183	Proc0	2961.680	Proc0	0.233	Proc0	0.327
		Proc1	0.219	Proc1	2959.567	Proc1	0.316	Proc1	0.426
		Proc2	0.218	Proc2	2961.787	Proc2	0.315	Proc2	0.417
		Proc3	0.218	Proc3	2961.772	Proc3	0.321	Proc3	0.415
		MAX	**0.219**	**MAX**	**2961.787**	**MAX**	**0.321**	**MAX**	**0.426**
3	1,000,000	Proc0	0.249	Proc0	3463.755	Proc0	0.287	Proc0	0.353
		Proc1	0.300	Proc1	3461.900	Proc1	0.359	Proc1	0.449
		Proc2	0.306	Proc2	3463.840	Proc2	0.364	Proc2	0.449
		MAX	**0.306**	**MAX**	**3463.840**	**MAX**	**0.364**	**MAX**	**0.449**
2	1,000,000	Proc0	0.301	Proc0	4643.262	Proc0	0.387	Proc0	0.380
		Proc1	0.359	Proc1	4643.329	Proc1	0.462	Proc1	0.456
		MAX	**0.359**	**MAX**	**4643.329**	**MAX**	**0.462**	**MAX**	**0.456**
Serial Time	1	1,000,000	**Proc0**	**0.515**	**Proc0**	**8529.562**	**Proc0**	**0.587**	**Proc0**	**0.658**

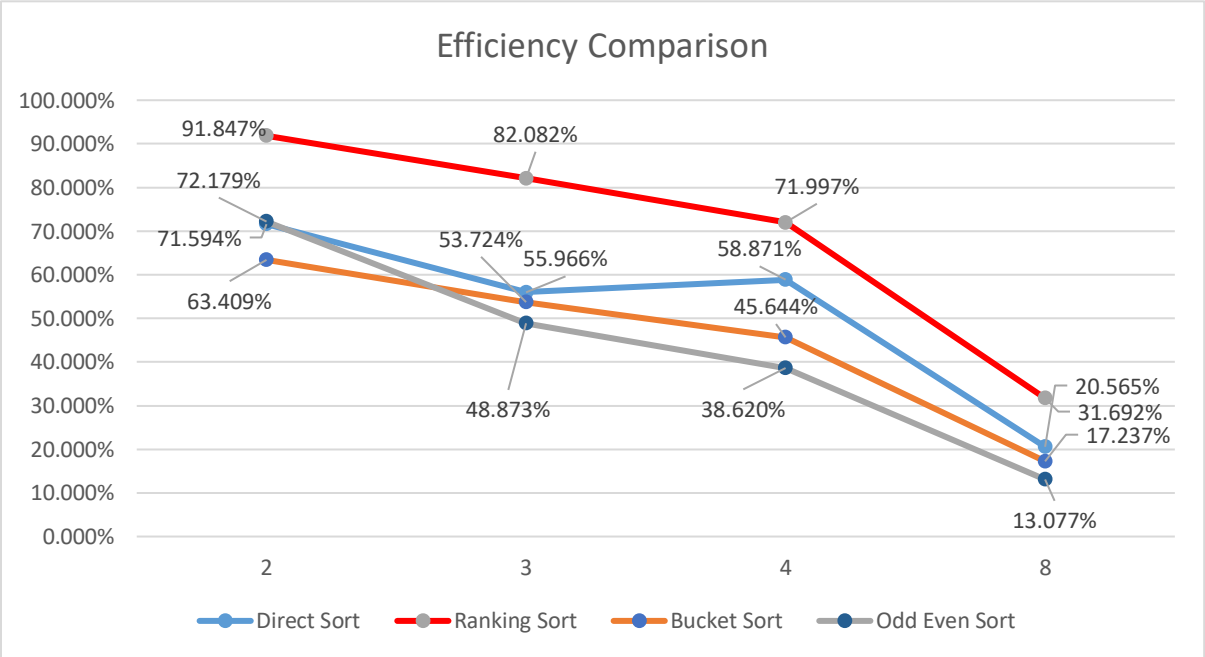
		Direct Sort	Ranking Sort	Bucket Sort	Odd Even Sort
SpeedUp	2 Procs	1.432	1.837	1.268	1.444
Ideal		2	2	2	2
Efficiency		71.594%	91.847%	63.409%	72.179%
SpeedUp	3 Procs	1.679	2.462	1.612	1.466
Ideal		3	3	3	3
Efficiency		55.966%	82.082%	53.724%	48.873%
SpeedUp	4 Procs	2.355	2.880	1.826	1.545
Ideal		4	4	4	4
Efficiency		58.871%	71.997%	45.644%	38.620%
SpeedUp	8 Procs	1.645	2.535	1.379	1.046
Ideal		8	8	8	8
Efficiency		20.565%	31.692%	17.237%	13.077%



**Ranking sort was not included in the same chard because the execution times are way too big.*




SpeedUp Comparison
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
2.880
2.462
2.355
2.535
1.837
1.679
1.826
1.645
1.612
1.444
1.379
1.432
1.545
1.466
1.268
1.046
2
3
4
8
Direct Sort
Ranking Sort
Bucket Sort
Odd Even Sort


Efficiency Comparison
100.000%
90.000%
80.000%
70.000%
60.000%
50.000%
40.000%
30.000%
20.000%
10.000%
0.000%
91.847%
82.082%
71.997%
72.179%
71.594%
53.724%
55.966%
58.871%
63.409%
45.644%
20.565%
31.692%
17.237%
48.873%
38.620%
13.077%
2
3
4
8
Direct Sort
Ranking Sort
Bucket Sort
Odd Even Sort