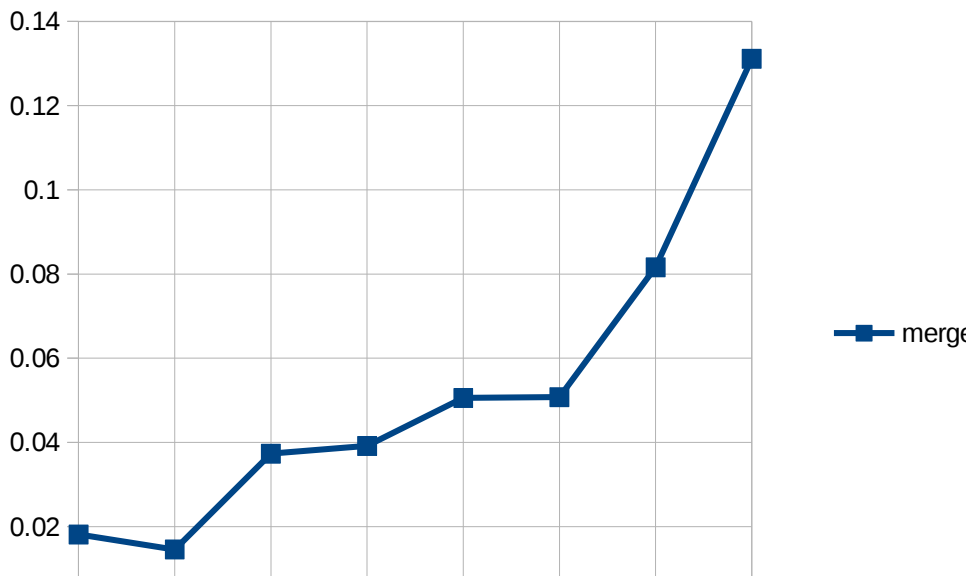
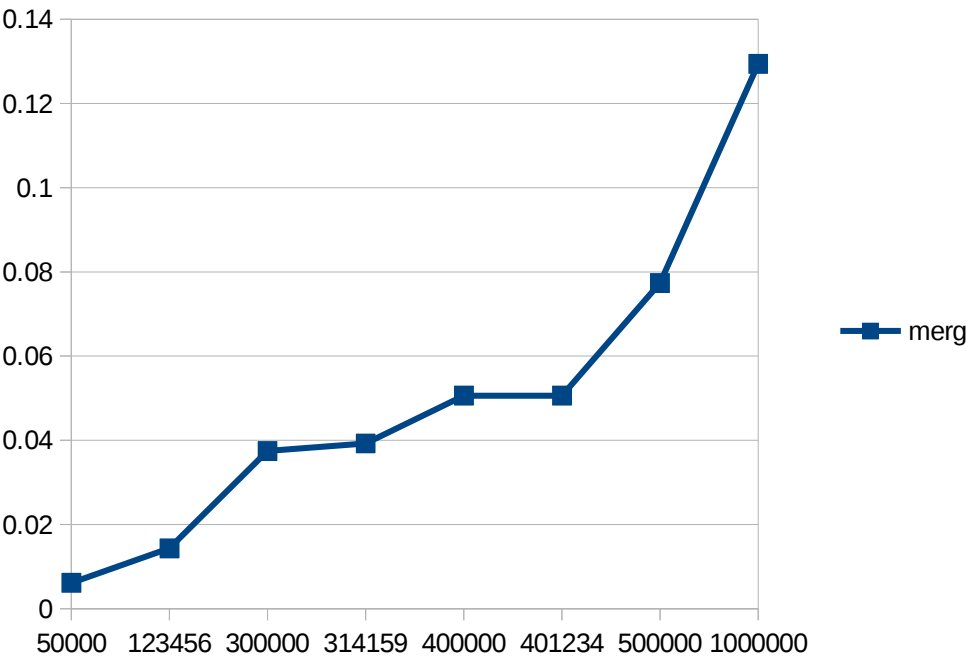
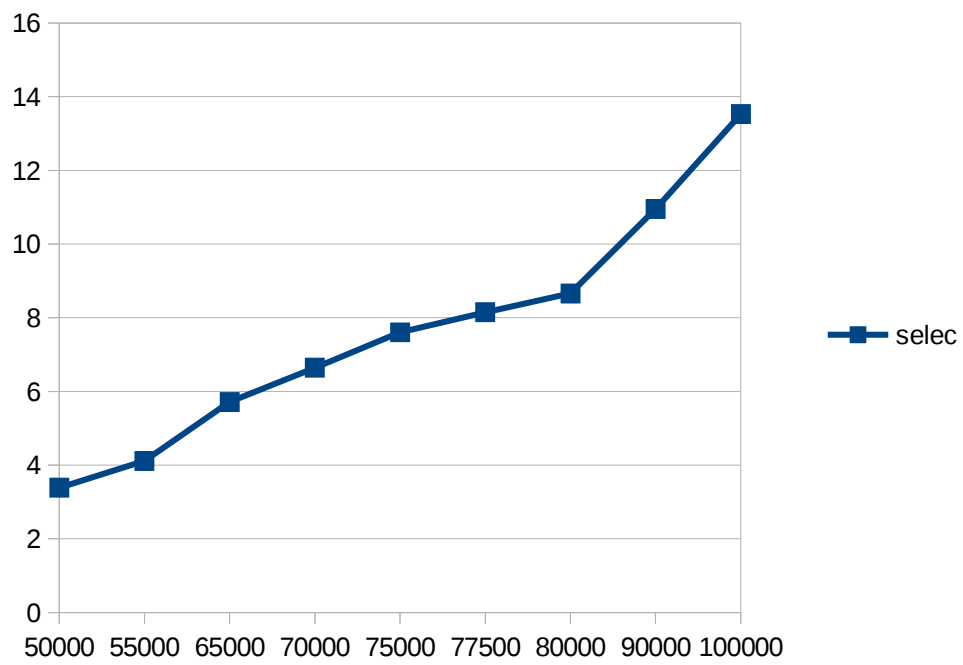
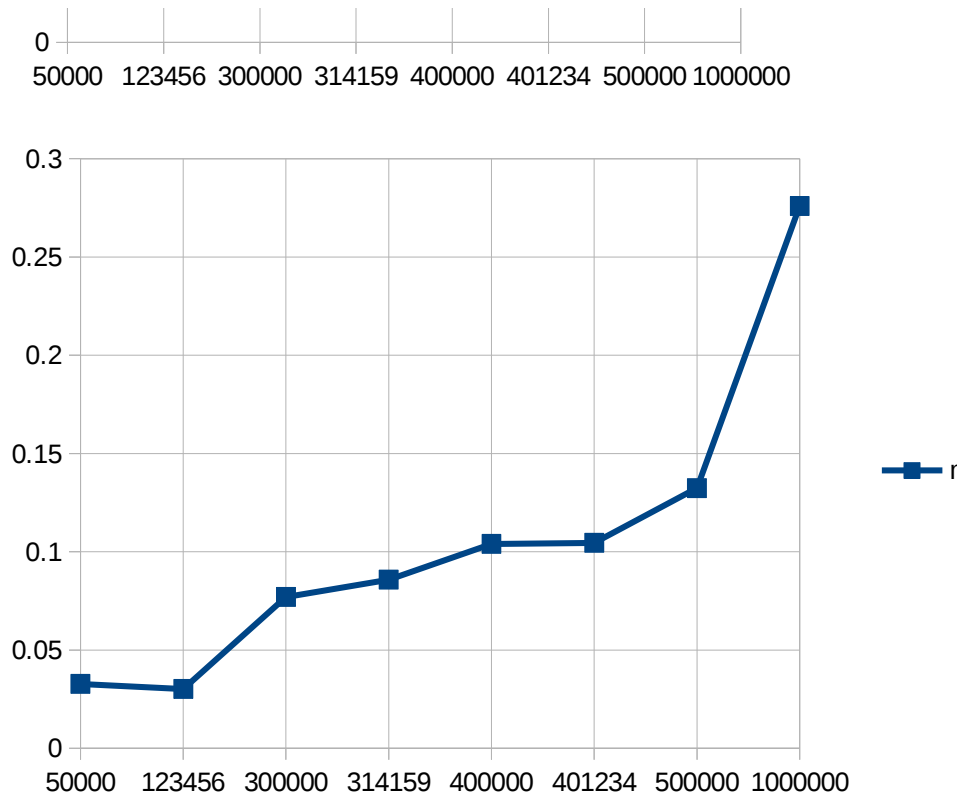


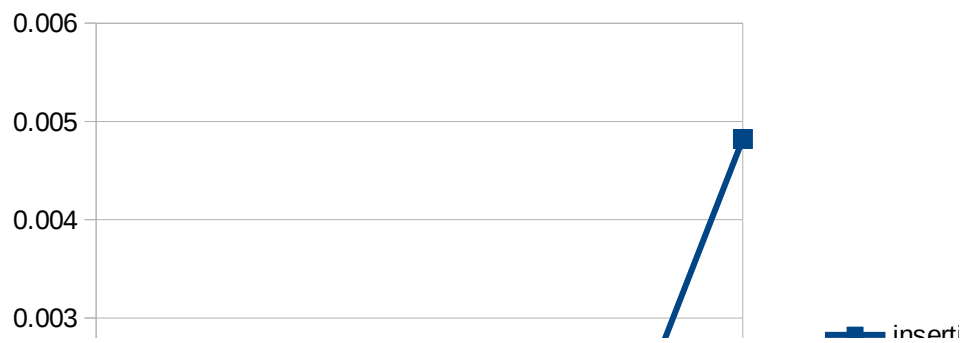
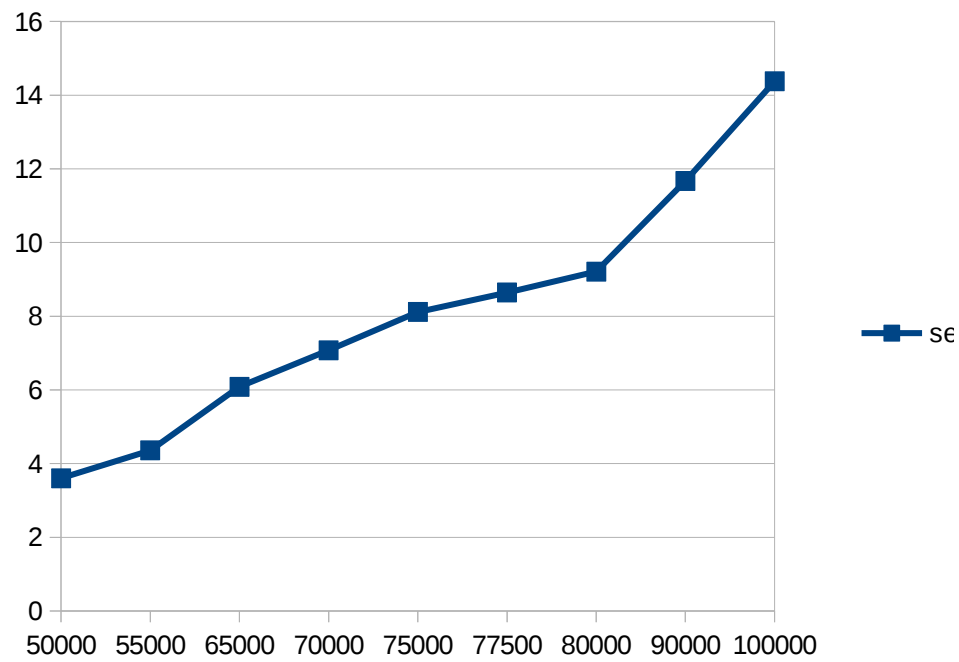
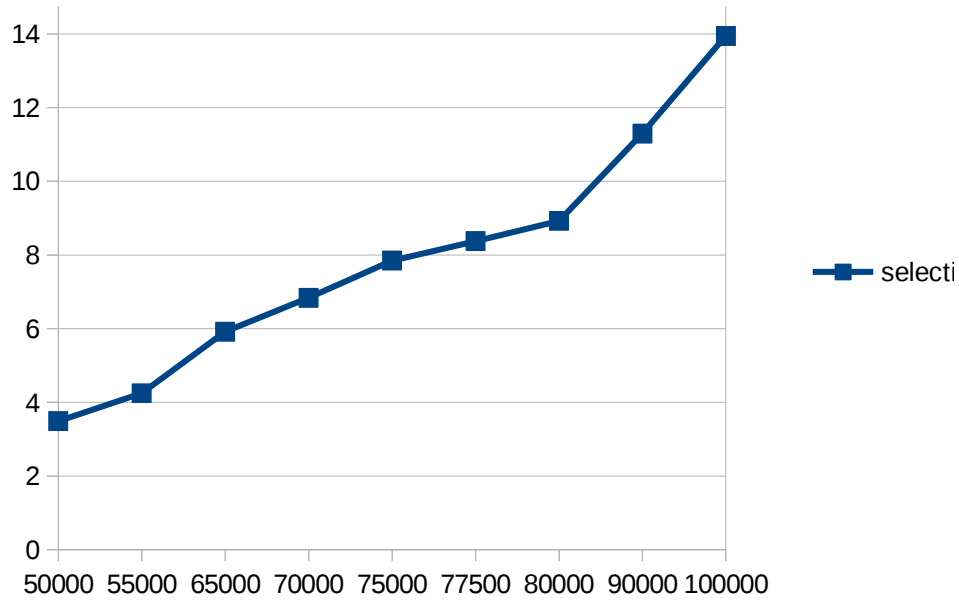
Sheet1

size	bubble ascending time	insertion ascending time	merge ascending time
50000	0.000543254	0.000789435	0.0061414
123456	0.000409883	0.00194014	0.0143608
300000	0.000993579	0.0014503	0.0374766
314159	0.00103976	0.00151866	0.0392487
400000	0.00132601	0.0019318	0.0505987
401234	0.00134209	0.00193896	0.0506145
500000	0.00166132	0.00241115	0.0773748
1000000	0.00337572	0.00482162	0.129426

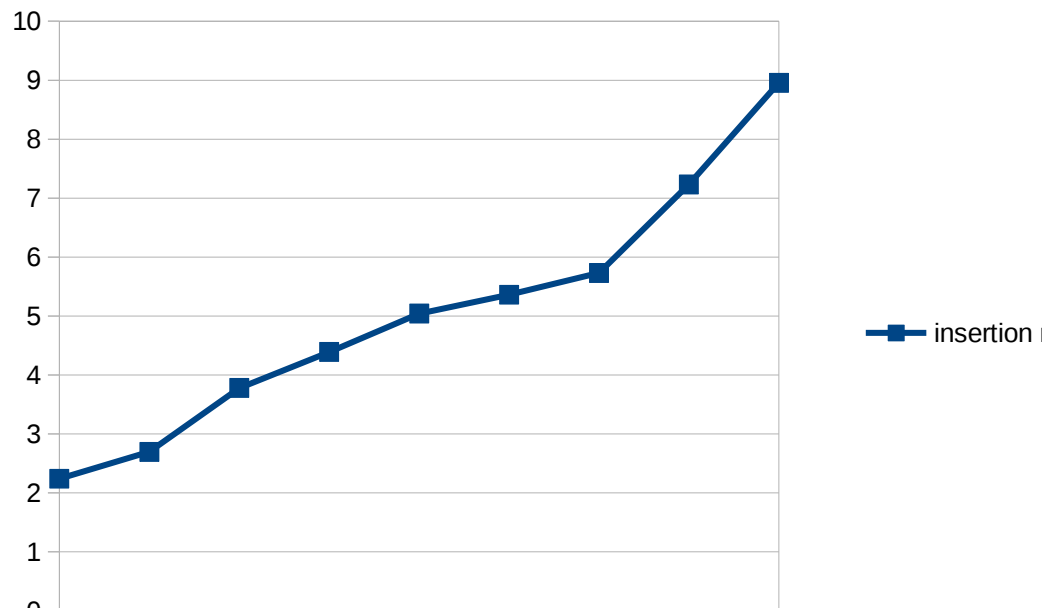
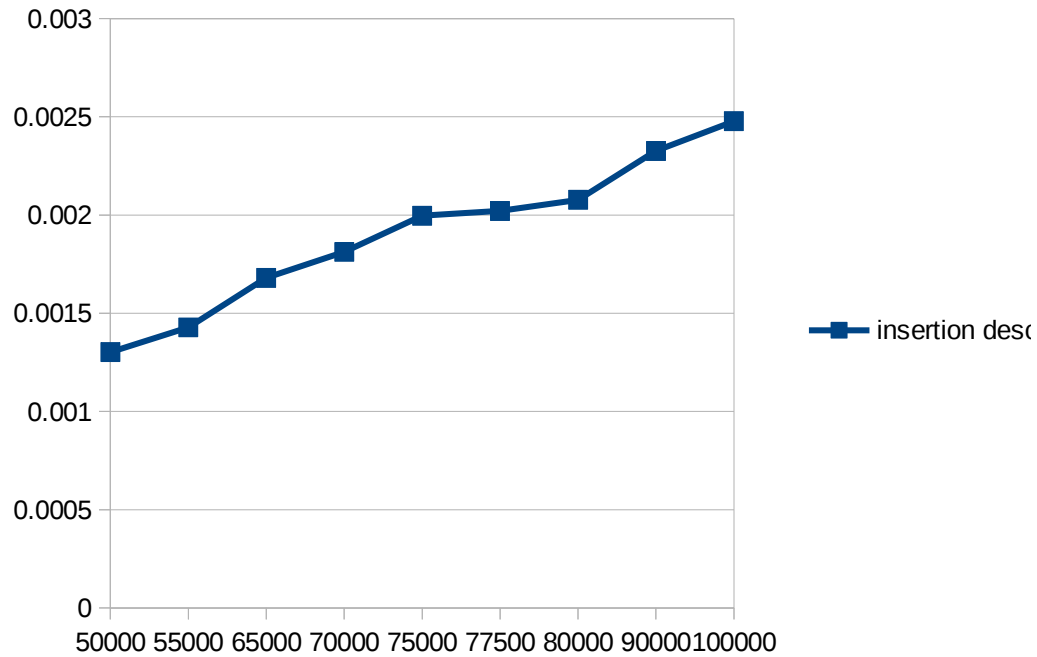
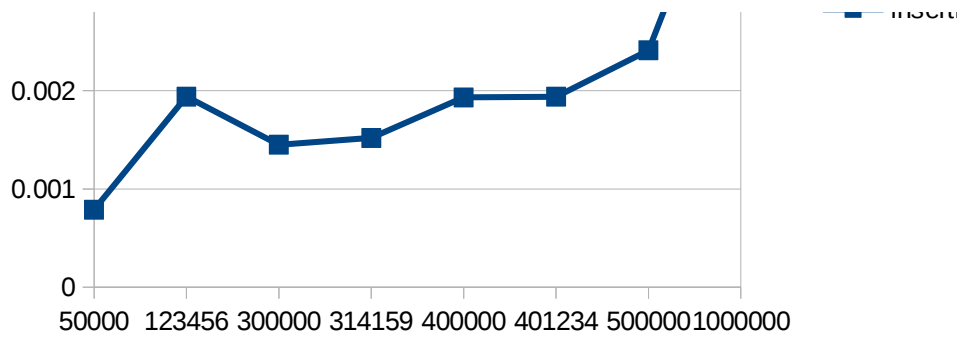




Sheet1



Sheet1



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50000 55000 65000 70000 75000 77500 80000 90000 100000

Sheet1

quick ascending time	merge descending time	merge random time	quick descending time
0.00485555	0.0181525	0.0327376	0.00461833
0.0110998	0.0145877	0.0301882	0.0113998
0.027692	0.0373456	0.0769913	0.0275581
0.0287663	0.0391764	0.085812	0.0286164
0.0365836	0.0505758	0.103939	0.0536731
0.036744	0.0507752	0.104533	0.0549362
0.0643925	0.0816182	0.132411	0.0633876
0.100692	0.131105	0.27598	0.112239

size	selection ascending time	selection descending time
50000	3.38544	3.49041
55000	4.11476	4.24731
65000	5.71231	5.91825
70000	6.64425	6.83624
75000	7.60358	7.85079
77500	8.14891	8.37709
80000	8.66008	8.92606
90000	10.9504	11.2968
100000	13.527	13.9463

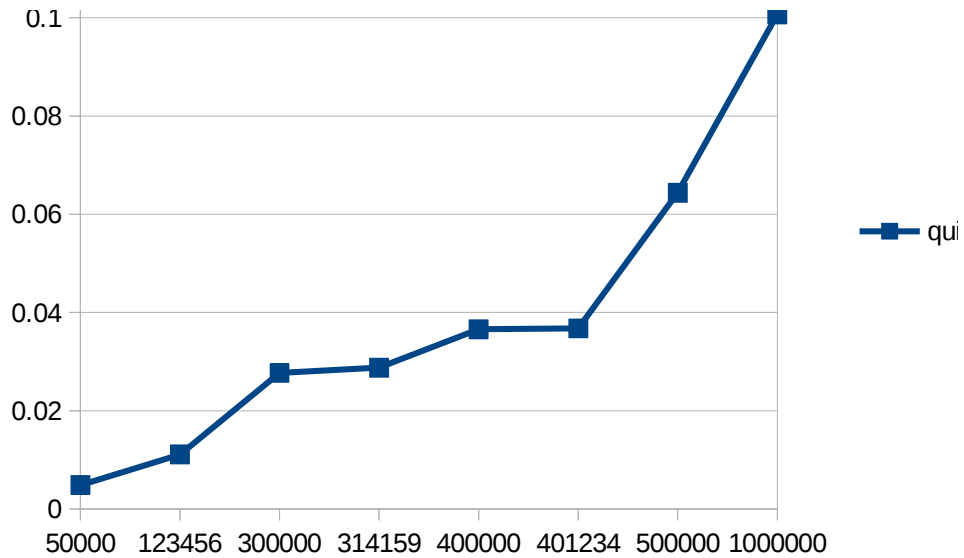
size	insertion descending time	insertion random time
50000	0.00130257	2.23887
55000	0.00142835	2.69616
65000	0.00168074	3.77888
70000	0.00181263	4.3878
75000	0.00199676	5.04242
77500	0.00202155	5.36215
80000	0.00207749	5.73165
90000	0.00232659	7.23264
100000	0.00247816	8.95711

size	bubble descending time	Bubble random time
50000	15.9217	16.1847
55000	19.2637	19.5778
65000	26.924	27.4871
70000	31.1875	31.8693
75000	35.734	36.5672
77500	38.1646	39.0674
80000	40.666	41.6359
90000	51.6041	52.818
100000	63.551	65.0879

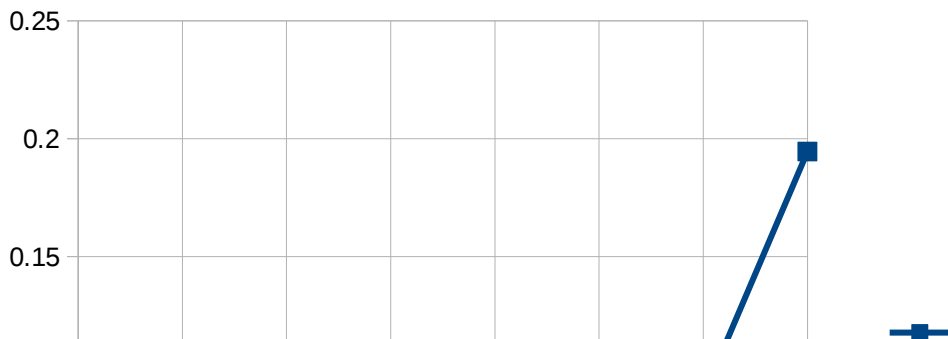
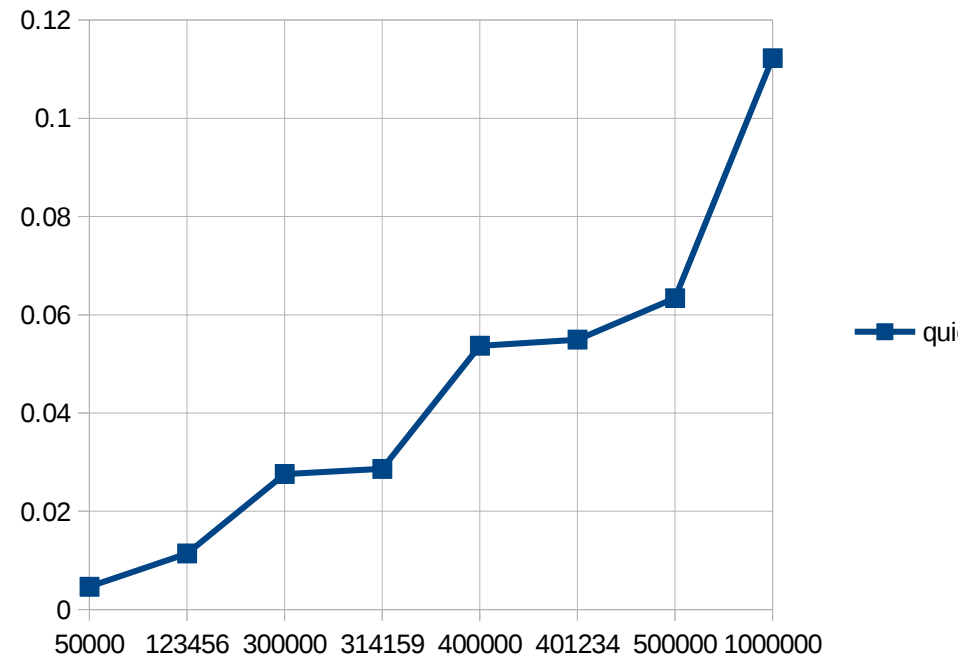


Sheet1

merge random time

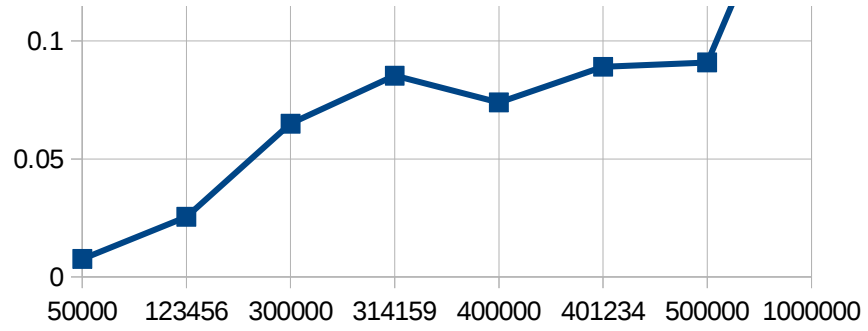


tion ascending time

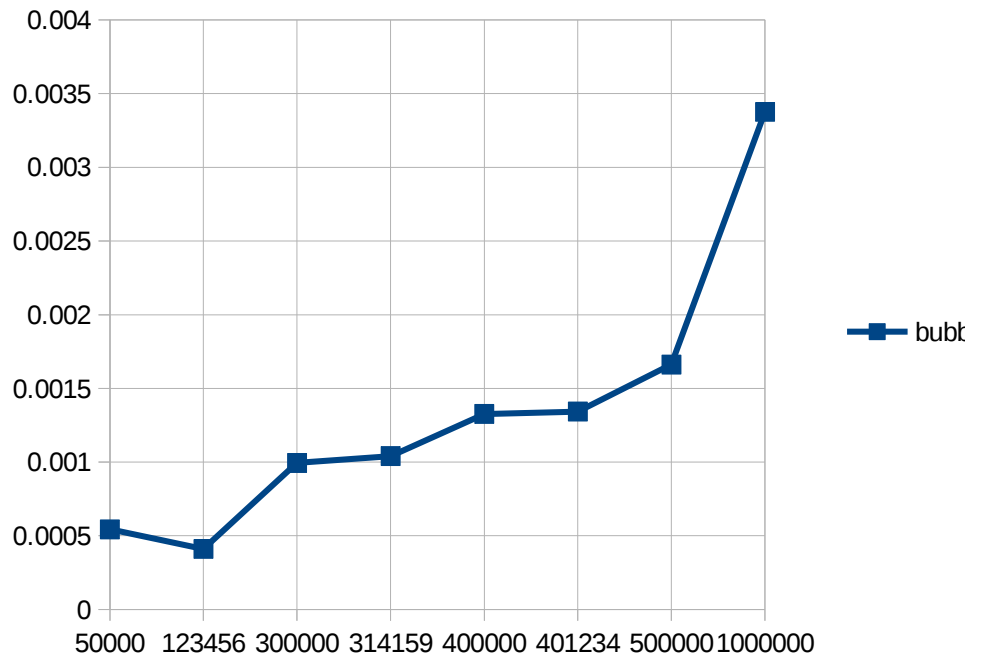


Sheet1

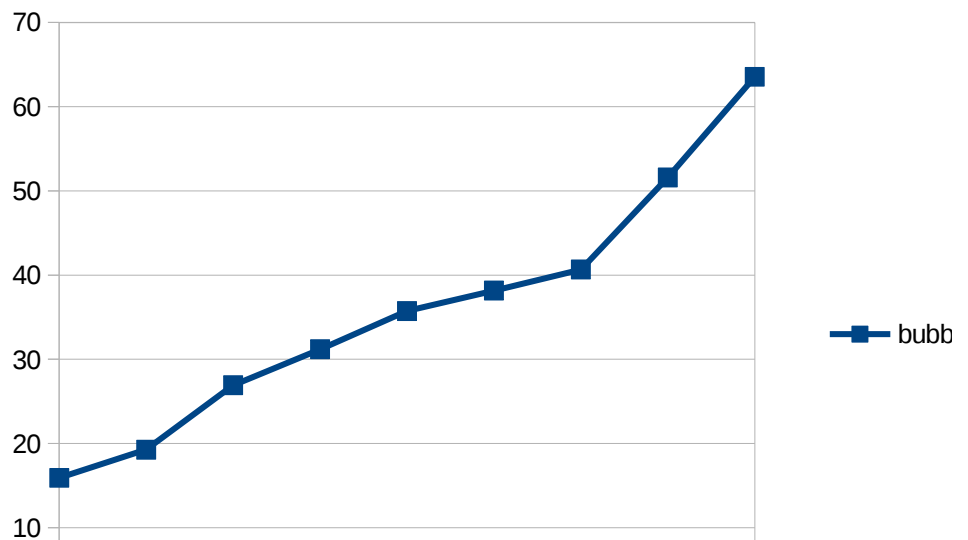
ion descending time



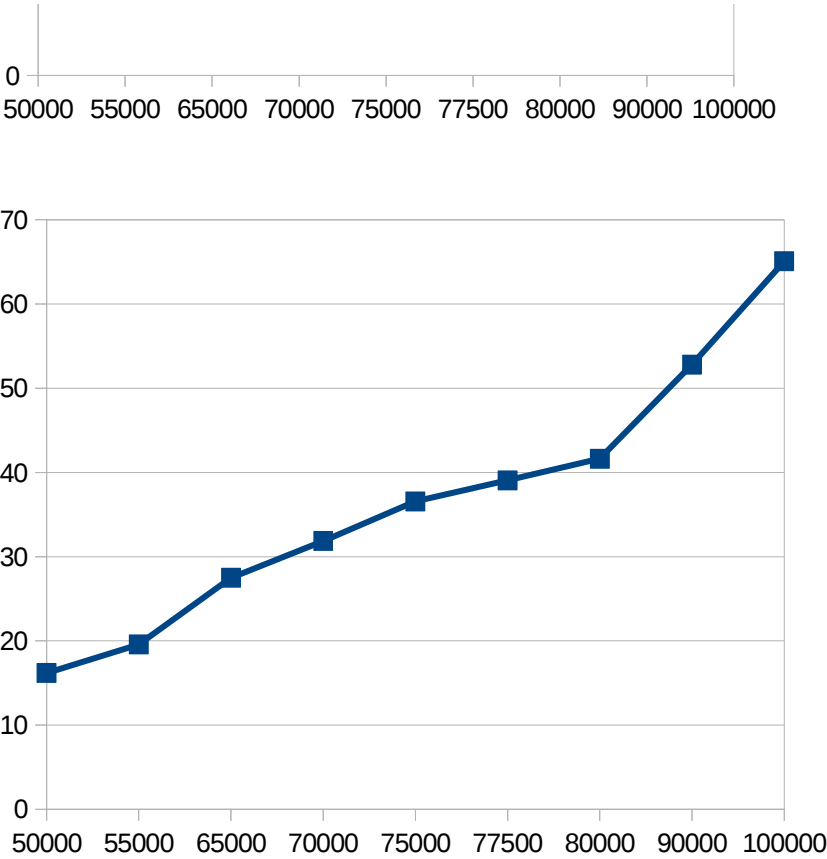
selection random time



ion ascending time



ion ascending time



ending time

random time

quick random time

0.00755115
0.025417
0.0649621
0.085276
0.0739445
0.0890593
0.090916
0.194577

selection random time

3.60014
4.35819
6.083
7.07407
8.11607
8.64438
9.21032
11.6676
14.3758

ick ascending time

ck descending time

quick random time

Spent random time

Spent ascending time

Spent descending time

Bubble random time