

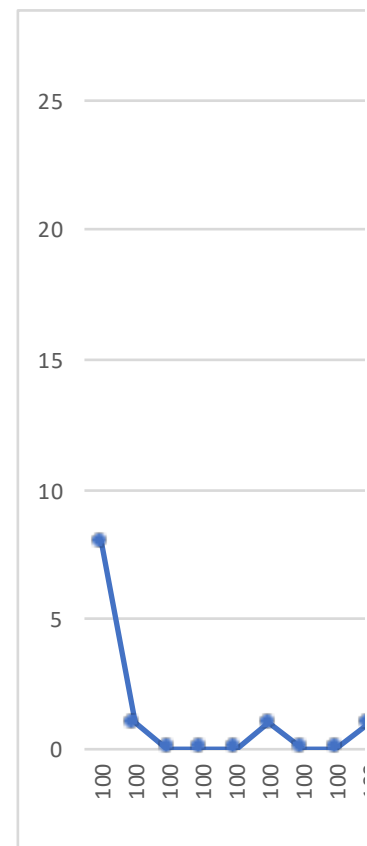
Summa av tid ms Kolumnetiketter					
Radetiketter	100	1000	10000	100000	Totalsumma
insertionSort	79	100	2108	151571	153858
Mergesort	1	9	53	192	255
Quicksort	11	8	46	128	193
Totalsumma	91	117	2207	151891	154306

Algoritm	tid ms	antal element
Mergesort	1	100
Mergesort	0	100
Mergesort	0	100
Mergesort	0	100
Mergesort	0	100
Mergesort	0	100
Mergesort	0	100
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Mergesort	2	10000
Mergesort	2	10000
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Mergesort	37	100000
Mergesort	23	100000
Mergesort	21	100000
Mergesort	33	100000
Mergesort	19	100000
Mergesort	19	100000
Mergesort	21	100000

Mergesort	20	100000
Mergesort	22	100000
Mergesort	21	100000
Mergesort	444	1000000
Mergesort	440	1000000
Mergesort	437	1000000
Mergesort	443	1000000
Mergesort	437	1000000
Mergesort	438	1000000
Mergesort	432	1000000
Mergesort	433	1000000
Mergesort	436	1000000
Mergesort	434	1000000
Mergesort	5109	10000000
Mergesort	5087	10000000
Mergesort	5051	10000000
Mergesort	5485	10000000
Mergesort	5299	10000000
Mergesort	5137	10000000
Mergesort	5103	10000000
Mergesort	5098	10000000
Mergesort	5076	10000000
Mergesort	5076	10000000

insertionSort	1	100
insertionSort	70	100
insertionSort	1	100
insertionSort	0	100
insertionSort	1	100
insertionSort	1	100
insertionSort	0	100
insertionSort	5	100
insertionSort	0	100
insertionSort	0	100
insertionSort	40	1000
insertionSort	12	1000
insertionSort	3	1000
insertionSort	3	1000
insertionSort	4	1000
insertionSort	2	1000
insertionSort	4	1000
insertionSort	4	1000
insertionSort	25	1000
insertionSort	3	1000
insertionSort	423	10000
insertionSort	326	10000
insertionSort	267	10000
insertionSort	151	10000
insertionSort	163	10000
insertionSort	161	10000
insertionSort	148	10000
insertionSort	155	10000
insertionSort	146	10000
insertionSort	168	10000
insertionSort	15501	100000
insertionSort	15551	100000
insertionSort	15621	100000
insertionSort	14906	100000
insertionSort	14855	100000
insertionSort	14970	100000
insertionSort	14816	100000
insertionSort	14825	100000
insertionSort	15059	100000
insertionSort	15467	100000

Quicksort	8	100
Quicksort	1	100
Quicksort	0	100
Quicksort	0	100
Quicksort	0	100
Quicksort	1	100
Quicksort	0	100
Quicksort	0	100
Quicksort	1	100
Quicksort	0	100
Quicksort	0	1000
Quicksort	2	1000
Quicksort	1	1000
Quicksort	1	1000
Quicksort	0	1000
Quicksort	0	1000
Quicksort	1	1000
Quicksort	0	1000
Quicksort	3	1000
Quicksort	0	1000
Quicksort	5	10000
Quicksort	20	10000
Quicksort	12	10000
Quicksort	2	10000
Quicksort	1	10000
Quicksort	2	10000
Quicksort	1	10000
Quicksort	1	10000
Quicksort	1	10000
Quicksort	1	10000
Quicksort	19	100000
Quicksort	16	100000
Quicksort	17	100000
Quicksort	11	100000
Quicksort	11	100000
Quicksort	11	100000
Quicksort	11	100000
Quicksort	10	100000
Quicksort	11	100000
Quicksort	11	100000
Quicksort	213	1000000
Quicksort	220	1000000
Quicksort	213	1000000
Quicksort	210	1000000
Quicksort	203	1000000
Quicksort	202	1000000
Quicksort	202	1000000
Quicksort	202	1000000



Quicksort	199	1000000
Quicksort	201	1000000
Quicksort	2914	10000000
Quicksort	2801	10000000
Quicksort	2790	10000000
Quicksort	2636	10000000
Quicksort	2993	10000000
Quicksort	2691	10000000
Quicksort	2561	10000000
Quicksort	2544	10000000
Quicksort	2537	10000000
Quicksort	2547	10000000

Quicksort

The graph illustrates the time complexity of Quicksort. The x-axis represents the input size n on a logarithmic scale, ranging from 100 to 100,000. The y-axis represents the time complexity on a logarithmic scale, ranging from 100 to 100,000. The data points show a sharp increase in time complexity for n between 1,000 and 10,000, peaking at $n=10,000$, and another sharp increase for n between 10,000 and 100,000, peaking at $n=100,000$.

n	Time Complexity
100	100
1000	100
10000	10000
100000	100000

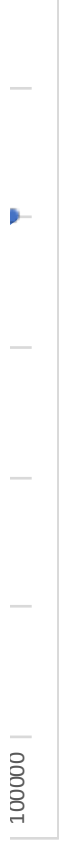
Mergesort	1	100
Mergesort	0	100
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Mergesort	0	100
Mergesort	0	100
Mergesort	0	100
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Mergesort	1	1000
Mergesort	0	1000
Mergesort	0	1000
Mergesort	1	1000
Mergesort	3	1000
Mergesort	2	1000
Mergesort	18	10000
Mergesort	20	10000
Mergesort	1	10000
Mergesort	2	10000
Mergesort	2	10000
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Mergesort	18	100000
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Mergesort	444	1000000
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Mergesort	437	1000000
Mergesort	443	1000000
Mergesort	437	1000000
Mergesort	438	1000000
Mergesort	432	1000000
Mergesort	433	1000000



Mergesort	436	1000000
Mergesort	434	1000000
Mergesort	5109	10000000
Mergesort	5087	10000000
Mergesort	5051	10000000
Mergesort	5485	10000000
Mergesort	5299	10000000
Mergesort	5137	10000000
Mergesort	5103	10000000
Mergesort	5098	10000000
Mergesort	5076	10000000
Mergesort	5076	10000000

Merge sort

n	Time Complexity
100	100
200	100
300	100
400	100
500	100
600	100
700	100
800	100
900	100
1000	100
1100	100
1200	100
1300	100
1400	100
1500	100
1600	100
1700	100
1800	100
1900	100
2000	100
2200	100
2400	100
2600	100
2800	100
3000	100
3200	100
3400	100
3600	100
3800	100
4000	100
4200	100
4400	100
4600	100
4800	100
5000	100
5200	100
5400	100
5600	100
5800	100
6000	100
6200	100
6400	100
6600	100
6800	100
7000	100
7200	100
7400	100
7600	100
7800	100
8000	100
8200	100
8400	100
8600	100
8800	100
9000	100
9200	100
9400	100
9600	100
9800	100
10000	100
10200	100
10400	100
10600	100
10800	100
11000	100
11200	100
11400	100
11600	100
11800	100
12000	100
12200	100
12400	100
12600	100
12800	100
13000	100
13200	100
13400	100
13600	100
13800	100
14000	100
14200	100
14400	100
14600	100
14800	100
15000	100
15200	100
15400	100
15600	100
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16000	100
16200	100
16400	100
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16800	100
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18000	100
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18400	100
18600	100
18800	100
19000	100
19200	100
19400	100
19600	100
19800	100
20000	100
20200	100
20400	100
20600	100
20800	100
21000	100
21200	100
21400	100
21600	100
21800	100
22000	100
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22400	100
22600	100
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27000	100
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28400	100
28600	100
28800	100
29000	100
29200	100
29400	100
29600	100
29800	100
30000	100
30200	100
30400	100
30600	100
30800	100
31000	100
31200	100
31400	100
31600	100
31800	100
32000	100
32200	100
32400	100
32600	100
32800	100
33000	1



	100	1 000	10 000	100 000	1 000 000	10 000 000
Insertion sort	8	10	211	15 157		
Quicksort	1	1	5	13	207	2 701
Mergesort	0	1	5	19	437	5 152

