

2.91 Operation Counts for Merge Sort

Table 1: Performance of Mergesort on Random Sequences (Sizes and Operations Counts in Multiples of 1,000)

Size	Type	Assignments	Other	Comparisons	Total Ops
1	difference	1.166	1.678	0.271	3.115
	iterator	8.835	41.021	9.743	59.599
	value	14.358	0	9.756	24.114
	Total	24.359	42.699	19.77	86.828
4	difference	4.246	6.464	0.991	11.701
	iterator	34.283	187.267	46.92	268.47
	value	65.335	0	47.068	112.403
	Total	103.877	193.742	94.979	392.598
16	difference	16.592	25.646	3.855	46.093
	iterator	136.369	845.431	219.677	1201.48
	value	293.539	0	220.399	513.938
	Total	446.523	871.077	443.931	1761.53
64	difference	65.992	102.034	15.291	183.317
	iterator	544.821	3764.6	1007.1	5316.52
	value	1301.76	0	1009.67	2311.43
	Total	1912.54	3866.64	2032.05	7811.23
256	difference	263.024	408.821	61.011	732.856
	iterator	2176.24	16595.5	4539.91	23311.7
	value	5719.86	0	4550.4	10270.3
	Total	8159.13	17004.2	9151.32	34314.7
1024	difference	1052.69	1636.06	243.875	2932.63
	iterator	8709.27	72534.1	20207	101450
	value	24928.8	0	20250.1	45178.9
	Total	34691.4	74170.2	40701	149563