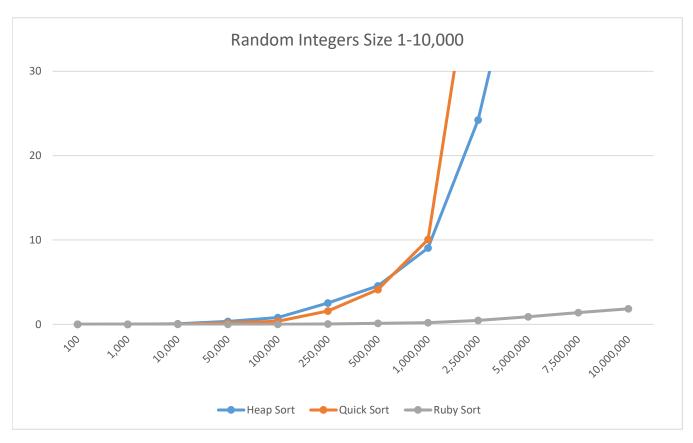
# Integer size 10\_000

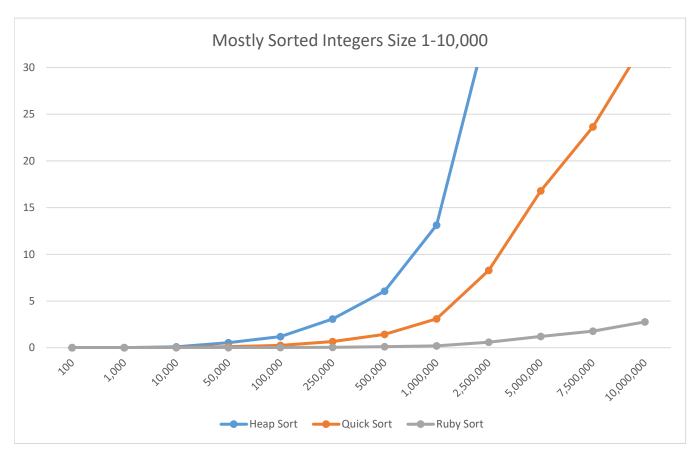
#### Random:

Number of Items	Heap Sort	Quick Sort	Ruby Sort
100	0.00024	0.00016	0.00001
1,000	0.00357	0.00397	0.00027
10,000	0.0621	0.02745	0.00169
50,000	0.34867	0.1845	0.009
100,000	0.80124	0.37363	0.01769
250,000	2.52485	1.57467	0.04853
500,000	4.56258	4.119035	0.122
1,000,000	9.05174	10.0644	0.18849
2,500,000	24.23324	48.18275	0.468
5,000,000	49.3994	166.021	0.907
7,500,000	76.561	349.71263	1.387
10,000,000	100.65495	555.11028	1.8447



### **Mostly Sorted:**

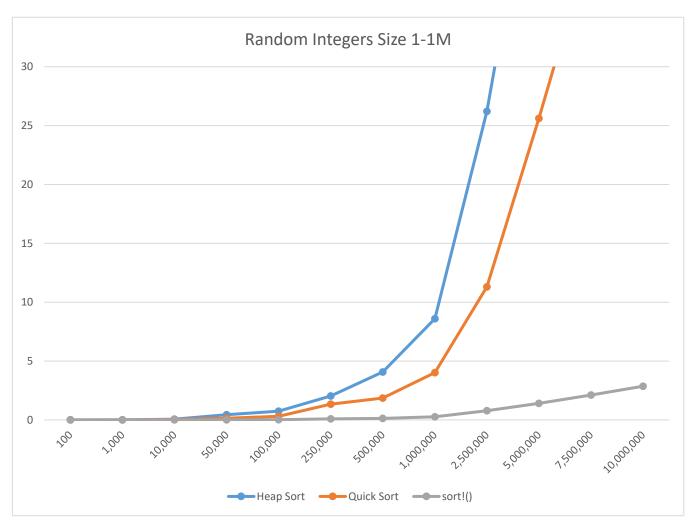
Number of Items	Heap Sort	Quick Sort	Ruby Sort
100	0.00028	0.00011	0.00001
1,000	0.008315	0.0015	0.0001
10,000	0.09748	0.029175	0.00129
50,000	0.54471	0.10784	0.0065
100,000	1.18636	0.25506	0.02272
250,000	3.06665	0.66241	0.04783
500,000	6.05647	1.4241	0.10236
1,000,000	13.1334	3.08937	0.201
2,500,000	35.037234	8.2876	0.5933
5,000,000	73.4627	16.79153	1.21
7,500,000	113.69886	23.6536	1.772
10,000,000	154.6435	32.75842	2.76323



# Integers Size 1IVI

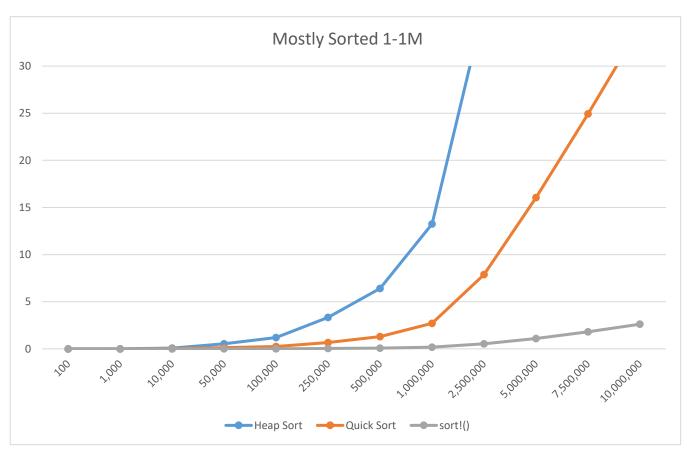
#### Random:

Number of Items	Heap Sort	Quick Sort	sort!()
100	0.00024	0.00015	0.00001
1,000	0.00547	0.00207	0.00133
10,000	0.05885	0.02945	0.00179
50,000	0.4394	0.1484	0.01
100,000	0.742743	0.30239	0.02268
250,000	2.03075	1.34377	0.0842
500,000	4.06748	1.85981	0.126
1,000,000	8.59808	4.01216	0.26388
2,500,000	26.21323	11.3	0.786
5,000,000	51.082	25.614	1.4054
7,500,000	76.017	40.745	2.111
10,000,000	106.11035	53.12882	2.86117



# **Mostly Sorted:**

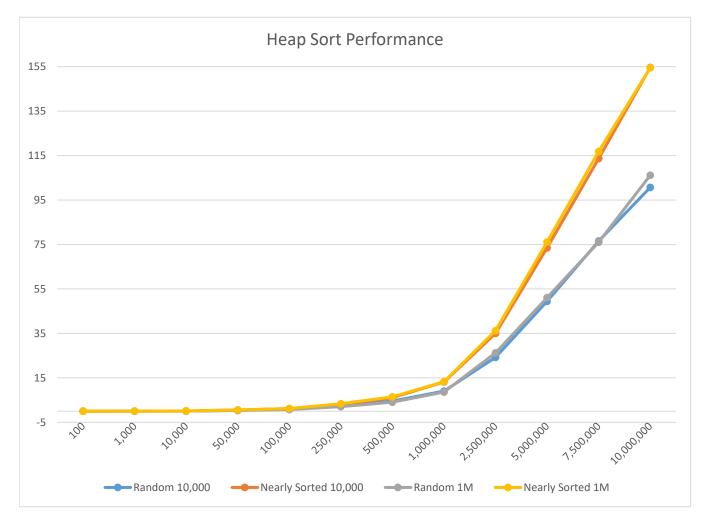
Number of Items	Heap Sort	Quick Sort	sort!()
100	0.00029	0.00014	0.00001
1,000	0.00684	0.00145	0.0001
10,000	0.078515	0.0222	0.001
50,000	0.53017	0.1299	0.01267
100,000	1.193156	0.240268	0.01342
250,000	3.33159	0.667	0.04
500,000	6.40854	1.30518	0.0849
1,000,000	13.25052	2.70145	0.18485
2,500,000	36.255	7.8937	0.53427
5,000,000	76.1516	16.0555	1.0968
7,500,000	116.8639	24.9245	1.8125
10,000,000	154.49514	34.17926	2.61695



### **Overview:**

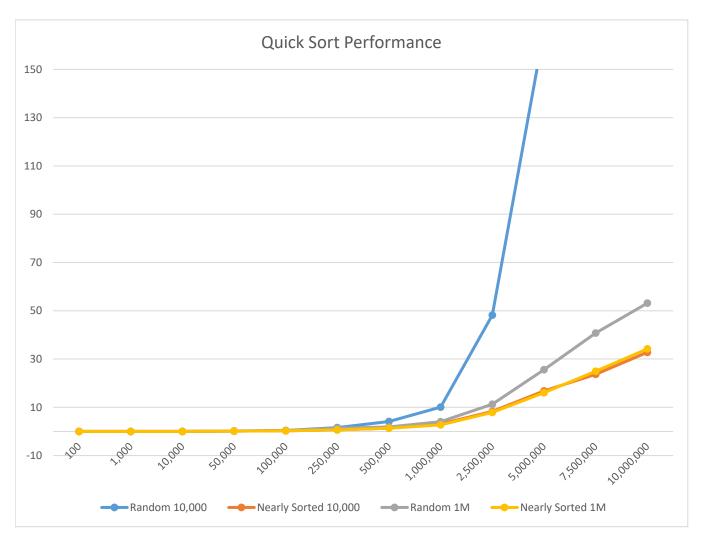
#### **Heap Sort:**

Number of Items	Random 10,000	Nearly Sorted 10,000	Random 1M	Nearly Sorted 1M
100	0.00024	0.00028	0.00024	0.00029
1,000	0.00357	0.008315	0.00547	0.00684
10,000	0.0621	0.09748	0.05885	0.078515
50,000	0.34867	0.54471	0.4394	0.53017
100,000	0.80124	1.18636	0.742743	1.193156
250,000	2.52485	3.06665	2.03075	3.33159
500,000	4.56258	6.05647	4.06748	6.40854
1,000,000	9.05174	13.1334	8.59808	13.25052
2,500,000	24.23324	35.037234	26.21323	36.255
5,000,000	49.3994	73.4627	51.082	76.1516
7,500,000	76.561	113.69886	76.017	116.8639
10,000,000	100.65495	154.6435	106.11035	154.49514



### **Quick Sort:**

Number of Items	Random 10,000	Nearly Sorted 10,000	Random 1M	Nearly Sorted 1M
100	0.00016	0.00011	0.00015	0.00014
1,000	0.00397	0.0015	0.00207	0.00145
10,000	0.02745	0.029175	0.02945	0.0222
50,000	0.1845	0.10784	0.1484	0.1299
100,000	0.37363	0.25506	0.30239	0.240268
250,000	1.57467	0.66241	1.34377	0.667
500,000	4.119035	1.4241	1.85981	1.30518
1,000,000	10.0644	3.08937	4.01216	2.70145
2,500,000	48.18275	8.2876	11.3	7.8937
5,000,000	166.021	16.79153	25.614	16.0555
7,500,000	349.71263	23.6536	40.745	24.9245
10,000,000	555.11028	32.75842	53.12882	34.17926



# Ruby .sort()

Number of Items	Random 10,000	Nearly Sorted 10,000	Random 1M	Nearly Sorted 1M
100	0.00001	0.00001	0.00001	0.00001
1,000	0.00027	0.0001	0.00133	0.0001
10,000	0.00169	0.00129	0.00179	0.001
50,000	0.009	0.0065	0.01	0.01267
100,000	0.01769	0.02272	0.02268	0.01342
250,000	0.04853	0.04783	0.0842	0.04
500,000	0.122	0.10236	0.126	0.0849
1,000,000	0.18849	0.201	0.26388	0.18485
2,500,000	0.468	0.5933	0.786	0.53427
5,000,000	0.907	1.21	1.4054	1.0968
7,500,000	1.387	1.772	2.111	1.8125
10,000,000	1.8447	2.76323	2.86117	2.61695

