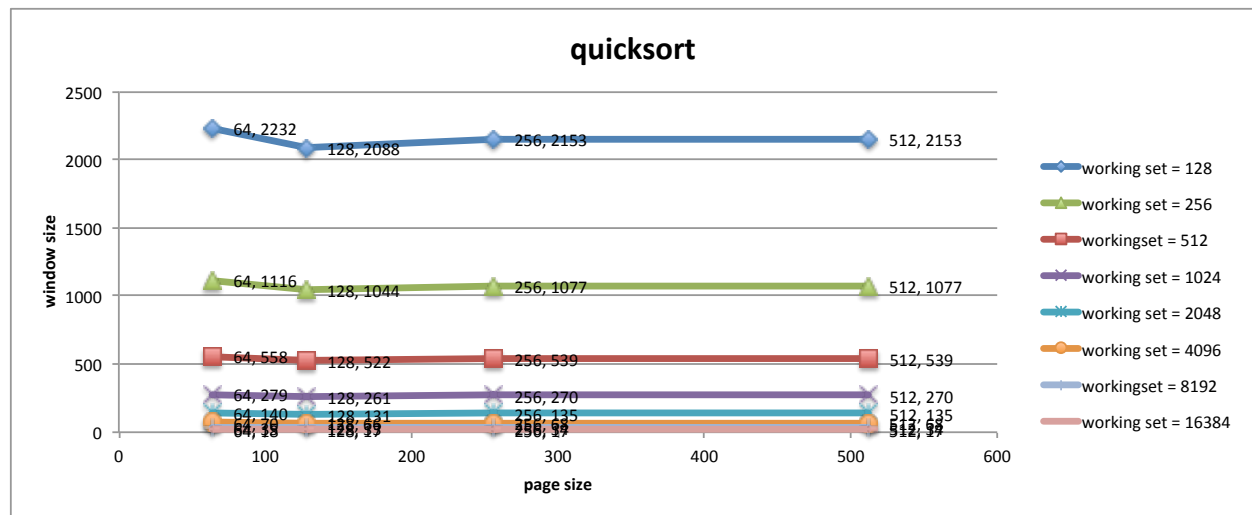


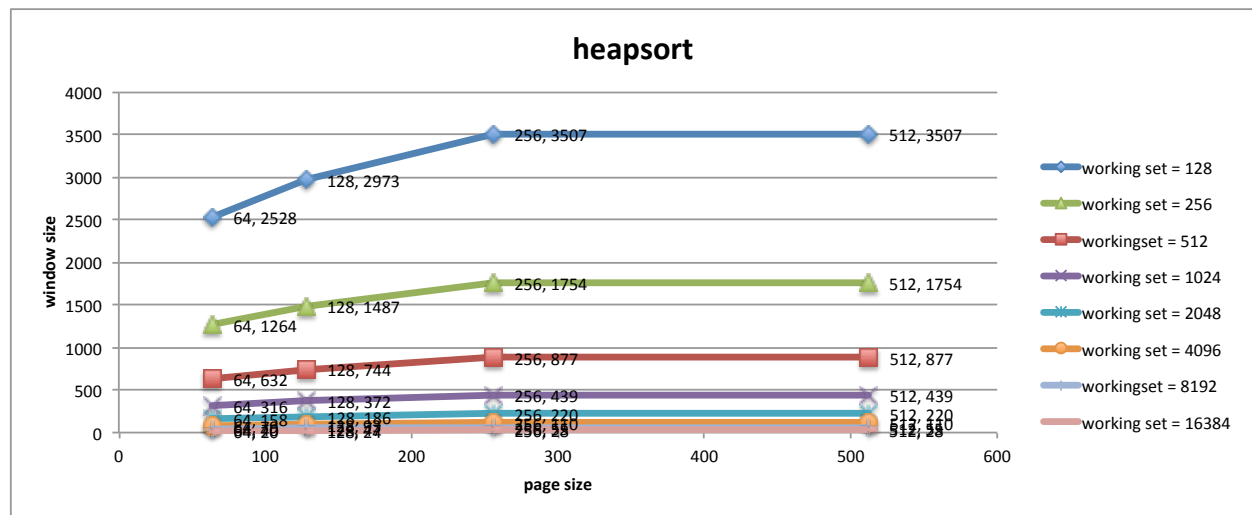
## Quicksort

	64	128	256	512
128	2232	2088	2153	2153
256	1116	1044	1077	1077
512	558	522	539	539
1024	279	261	270	270
2048	140	131	135	135
4096	70	66	68	68
8192	35	33	34	34
16384	18	17	17	17



## Heapsort

	64	128	256	512
128	2528	2973	3507	3507
256	1264	1487	1754	1754
512	632	744	877	877
1024	316	372	439	439
2048	158	186	220	220
4096	79	93	110	110
8192	40	47	55	55
16384	20	24	28	28



The similarities between the two sorting algorithms is every time the working size double, the number of working set size will be half.

The different between the two is.

In quicksort, we first move all the element less than pivot to the left and move all the element greater than than pivot to the right. Thus, we are referencing near-by elements, so the number of page reference per working set is quite small.

In heapsort, every time we sort, we replace the biggest element and the smallest element. Thus, we are referencing elements at the end. Thus number of page reference per working set is larger than quick sort.

