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		Runtime in "time units"									
N size	type	1	2	3	4	5	6	7	8	9	10
	java	0	0	0	0	1	0	0	1	1	0
	heapsort	1	0	1	1	1	1	0	0	1	1
500	PQ	4	4	3	4	4	4	4	4	4	5
	java	0	1	1	2	2	2	1	0	2	1
	heapsort	1	3	1	1	1	1	1	1	1	1
1000	PQ	10	14	11	8	14	9	9	10	8	9
	<mark>java</mark>	2	1	1	2	1	3	2	1	1	1
	heapsort	2	2	2	2	2	1	1	2	2	2
5000	PQ	72	37	56	80	35	38	36	33	34	34
	java	2	2	2	2	2	2	2	2	2	2
	heapsort	5	5	5	5	5	5	5	6	5	5
10000	PQ	100	75	80	77	77	80	76	81	77	80

Data was obtained by running and timing each PQ 12 times and removing the smallest and largest times for different values of N.

The Java implementation is much faster, likely because for java's implementation offer() (insert on my PQ) is a $\Theta(1)$ operation and worst case a O(logN) operation. This is because Java inserts into an ordered structure, instead of changing the array every time like PQasSortedArray.

Runtime: offer() = O(logN) insert() = $O(N^2)$ HeapSort() = O(NlogN)