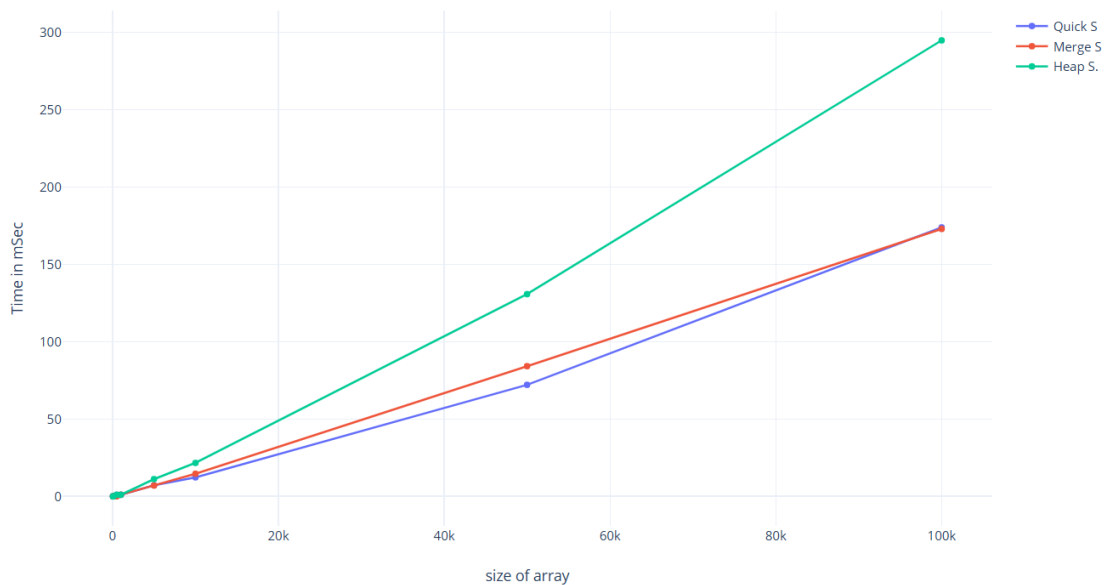


Time Comparison Report

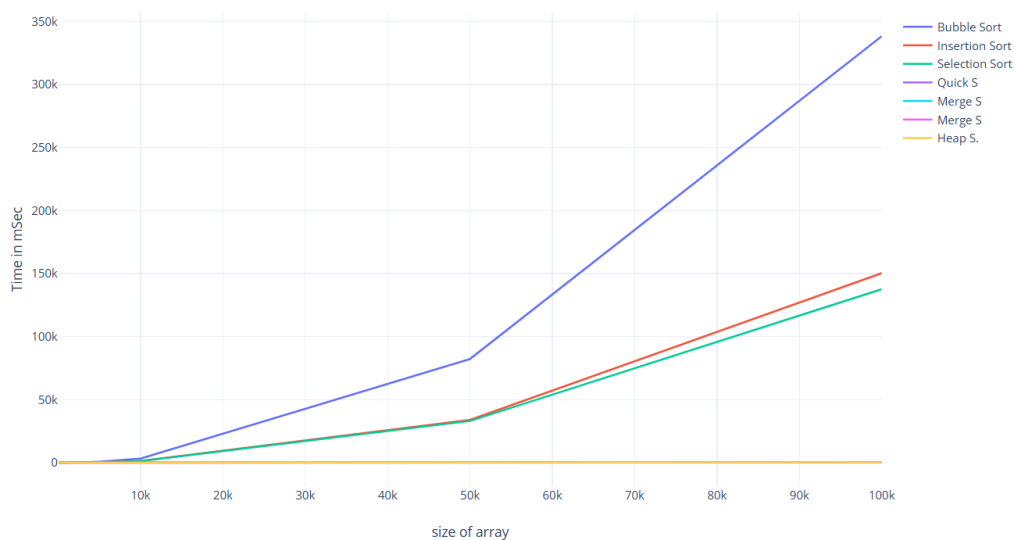
Report on Time complexity between **Bubble, Insertion, Selection, Quick, merge and Heap** Sorting Algorithm

Array size	Bubble Sort	Insertion Sort	Selection Sort	Quick S	Merge S	Heap S.
50	0	0	0	0	0	0
100	1	0	0	0	0	0
500	6.3	3.2	3	1	0	1
1000	32.13	13.52	13	1.01	1.02	1.01
5000	778.71	348.76	323.16	7.1	7	11.14
10000	3249.78	1319.78	1252.38	12.27	14.61	21.61
50000	82193.01	33936.97	33050.45	72.11	84.18	130.78
100000	338244.59	150274.49	137543.03	173.95	172.97	294.93

Time Comparison Graph



Click to enter Plot title



Running Time for Bubble Sort of array size 50: 0.00ms
Running Time for Insertion Sort of array size 50: 0.00ms
Running Time for Selection Sort of array size 50: 0.00ms
Running Time for Quick Sort of array size 50: 0.00ms
Running Time for Merge Sort of array size 50: 0.00ms
Running Time for Heap Sort of array size 50: 0.00ms

Running Time for Bubble Sort of array size 100: 1.00ms
Running Time for Insertion Sort of array size 100: 0.00ms
Running Time for Selection Sort of array size 100: 0.00ms
Running Time for Quick Sort of array size 100: 0.00ms
Running Time for Merge Sort of array size 100: 0.00ms
Running Time for Heap Sort of array size 100: 0.00ms

Running Time for Bubble Sort of array size 500: 6.30ms
Running Time for Insertion Sort of array size 500: 3.00ms
Running Time for Selection Sort of array size 500: 3.25ms
Running Time for Quick Sort of array size 500: 1.00ms
Running Time for Merge Sort of array size 500: 0.00ms
Running Time for Heap Sort of array size 500: 1.00ms

Running Time for Bubble Sort of array size 1000: 32.13ms
Running Time for Insertion Sort of array size 1000: 13.52ms
Running Time for Selection Sort of array size 1000: 13.65ms
Running Time for Quick Sort of array size 1000: 1.01ms
Running Time for Merge Sort of array size 1000: 1.02ms
Running Time for Heap Sort of array size 1000: 1.01ms

Running Time for Bubble Sort of array size 5000: 778.71ms
Running Time for Insertion Sort of array size 5000: 348.76ms
Running Time for Selection Sort of array size 5000: 323.16ms
Running Time for Quick Sort of array size 5000: 7.10ms
Running Time for Merge Sort of array size 5000: 7.00ms
Running Time for Heap Sort of array size 5000: 11.14ms