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Array size vs number of Comparisons

n	Insertion	Merge	Quick
10	33	32	57
50	630	22	398
100	2385	499	1042
200	10729	1079	2665
500	62275	3053	7749

The reason there is no radix sort comparison count is because radix sort never actually compares one value to another. The method I used, counting sort, uses the indices of the array to sort the numbers rather than any comparison of numbers.

Comparisons vs Array Size for different Sorts
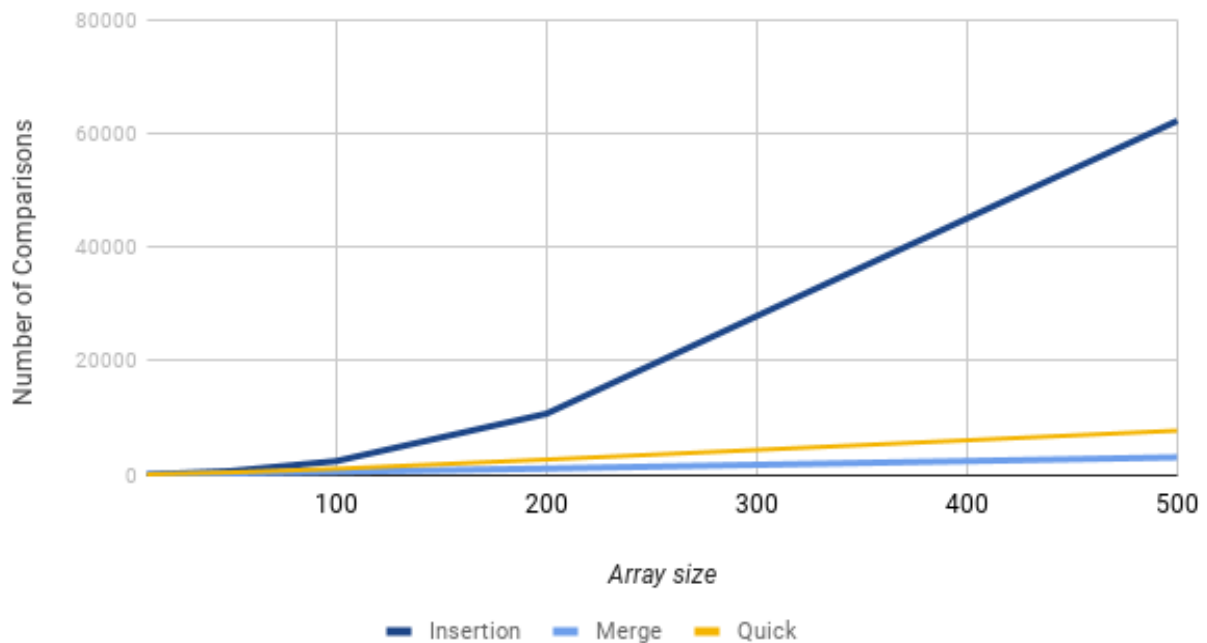
Design Enhancements:
     For this project, one design enhancement I made was in the driver SortsDriver class where I made a private method that would print the values of the array and the number of comparisons. This prevented me from copying and pasting the same line of code for each case in the switch statement.
     Another design change I made is in my radix sort method. For counting sort, instead of using arrays to get the number of times an element appeared, I used a hashmap where the key was the number and the value was how many times that number appeared. I then put these values

into an array. While I think this may have been less efficient, I was having difficulty using strictly arrays for that task.

Acknowledgements: