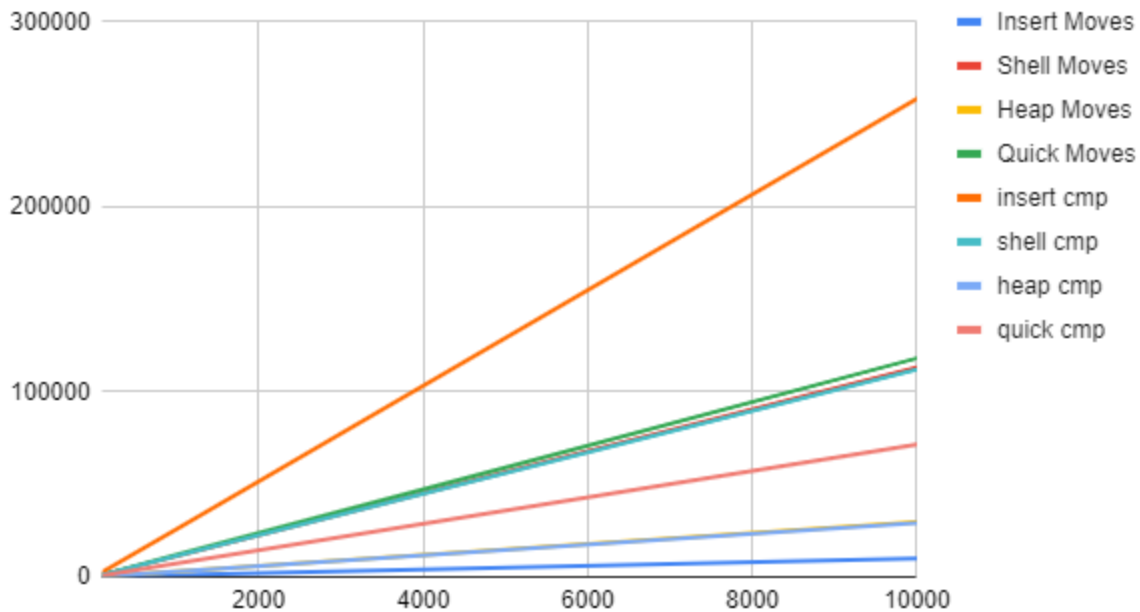


## Moves vs Comparisons



As we can see in the graph, the insertion sort has the least amount of moves compared to all other sorting algorithms. But in terms of comparison, insertion sort has the most amount of comparisons compared to the other sorting algorithms. Quick Sort has the most amount of moves in all the sorting algorithms. Heap Sort has the least amount of comparisons for all the sorting algorithms. We can see as n get larger insertion sort gets increasingly large in comparisons versus heap sort that remains stable. We can also see that with moves quicksort increases more in terms of moves than insertion sort but has less comparisons to handle. Overall, the ranking for the number of moves with comparison to n elements is from greatest to least: Quicksort, Shell Sort, Heap Sort, and Insertion Sort. The ranking for the number of comparisons with respect to n elements from greatest to least: Insertion Sort, Shell Sort, Quick Sort, and Heap Sort.