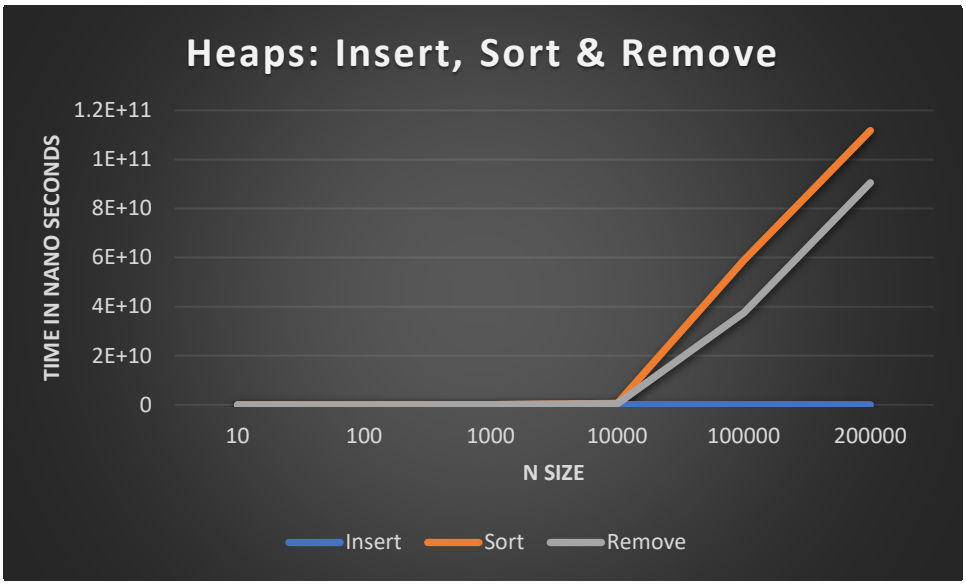

Insertion on Heaps is running at constant time, and this is matching our expectations of what the Heap insertion will do. When we insert, we add the element to the end of the heap and the call our siftUp method to move it to the appropriate location which is resulting in constant time, which is what we received is constant time as well.

Sort on Heaps is expected to be running at N(log(N)) time, when we call Sort, we add all the elements to a new list to be returned. When we add it to the new list, we must call removeFirst() this method runs at log(N) times. So overall Sort runs at N(log(N)) times, because it must touch each element and while doing so, it must also call siftDown.

Remove – Expected: log(N) - when we ran our remove method, this would remove the first element, and then we will call siftDown on the last element we moved to the top to find the correct new root for the heap. This resulted in log(N) time as well as you can see above.