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1. Who is your programming partner? Which of you submitted the source code of your program?
   - My programming partner is Daniel Zhu.

2. How often did you and your programming partner switch roles? Would you have preferred to switch less/more often? Why or why not?
   - We didn't switch roles that much. I prefer to switch less because I like doing one job at a time than switching.

3. Evaluate your programming partner. Do you plan to work with this person again?
   - He is alright. We had lots of problems taking time out and working until last day. If our schedule and time works out properly, I will work with him again.

4. If you had backed the sorted set with a Java List instead of a basic array, summarize the main points in which your implementation would have differed. Do you expect that using a Java List would have more or less efficient and why? (Consider efficiency both in running time and in program development time.
   - Java List already implements add and those kinds of methods already. So it would have been lot easier and faster.
5. What do you expect the Big-O behavior of BinarySearchSet's contains method to be and why?
   - logN

6. Plot the running time of BinarySearchSet's contains method, using the timing techniques demonstrated in Lab 2. Be sure to use a decent iteration count to get a reasonable average of running times. Include your plot in your analysis document. Does the growth rate of these running times match the Big-oh behavior you predicted in question 5?

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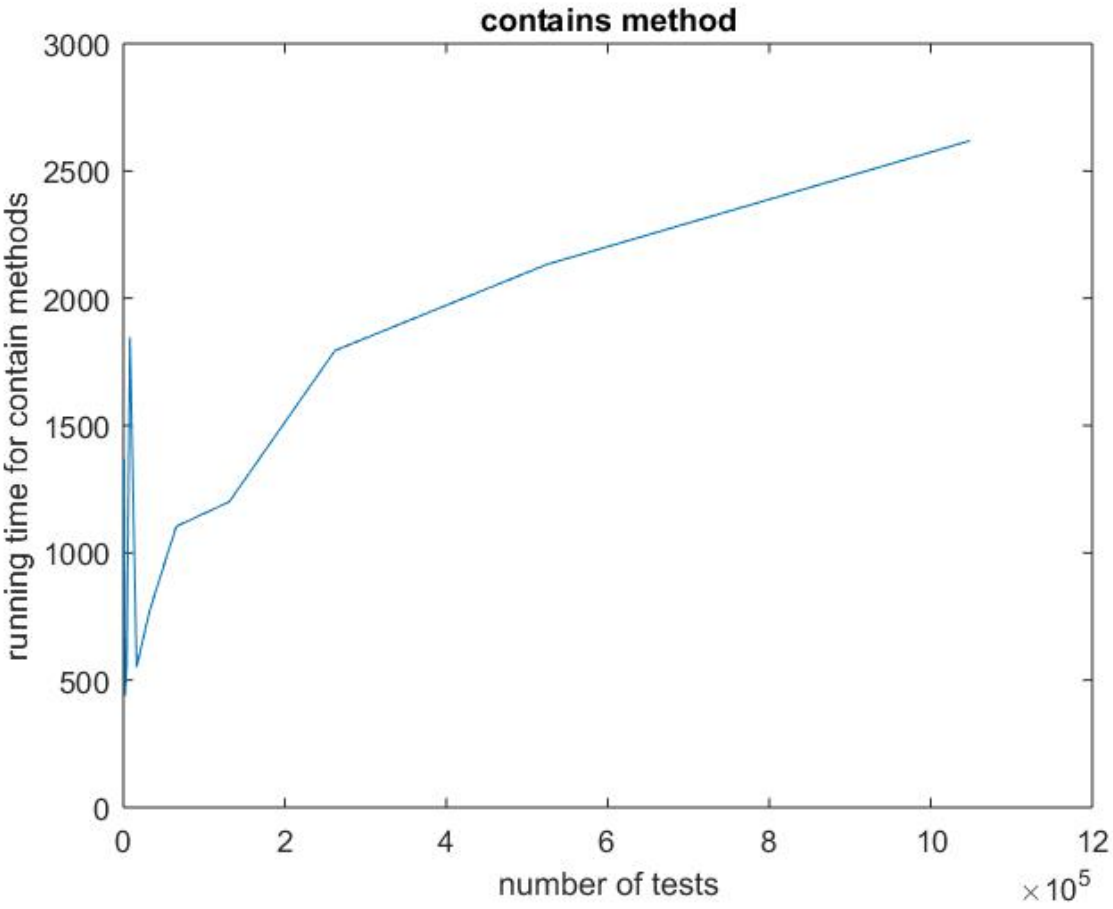

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yup matched the prediction.

7. Consider your add method. For an element not already contained in the set, how long does it take to locate the correct position at which to insert the element? Create a plot of running times. Pay close attention to the problem size for which you are collecting running times. Beware that if you simply add N items, the size of the sorted set is always changing. A good strategy is to fill a sorted set with N items and time how long it takes to add one additional item. To do this repeatedly (i.e., iteration count), remove the item and add it again, being careful not to include the time required to call remove() in your total. In the worst-case, how much time does it take to locate the position to add an element (give your answer using Big-oh)?

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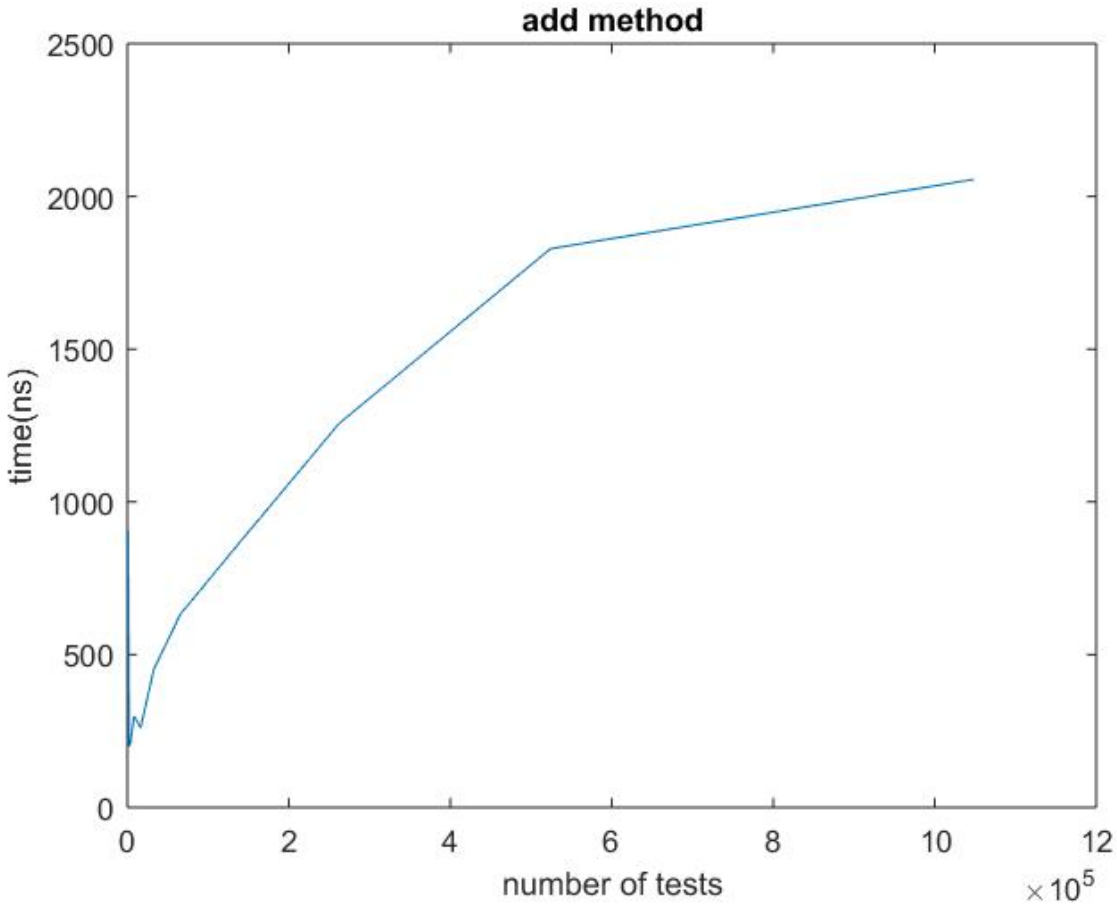

8. How many hours did you spend on this assignment?

   - I spent like 15-20 hours in this assignment.