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CS 2420

Assignment 3

1.) My programming partner was Emily Dennis, she submitted the code.

2.) We switched a fair amount, mostly when the concepts were easier to grasp. Our switching was quite often and I found it to be very effective, it helped in both of our understanding of the coding process.

3.) Emily worked very hard, and was very accomodating to my poor schedule, I would definitely work with her again.

4.) The differences would be, where we had to implement and write our methods, in the list we wouldn't need to. It would also be easier to develop, since we wouldn't need to worry about the way that we expanded our arrays, as the lists can grow. The runtime would be around the same, since the method use would be the same.

5.) $O(\log(n))$ because we will be dividing by 2, and then adding by 1 in the worst case

6.) The growth rate does not really match the behavior, because of the way that Java does not let us control the way memory is used. Therefore the timing is not at maximum accuracy. The values returned from the timing test were fluctuating rather than properly representing our predicted Big-O notation.

7.) $O(\log(n))$ as well since we use a the same binary search as we do in contains.

8.) 15 Hours