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Learning Experience – Linked Lists

This assignment help solidify my understanding of linked lists and inner classes. The instructions for the iterator method was not very clear and I had to do a lot of research to help with my understanding. The basic double linked list was fairly easy to implement. What helped me a lot was to draw out the data structures and using arrows to show the process of the methods I needed to implement. I used the same method for the sorted linked list, and it greatly made the process a lot smoother as it was as difficult to keep track of all the pointers involved in adding and sorting nodes.

A large bulk of this project was troubleshooting the sorted list. I was having issues with the add method as it was not functionally property and adding only the first node. This was due to the fact the I misinterpreted how the comparator compare functioned. My initial thoughts after going over class notes and resources, was that it functioned similarly to previous compare methods we have used in class and returns -1, 0, and 1, for less than, equal, and greater than respectively. But, in actuality the compare method returns any negative value, zero, or any positive values. This caused be a great deal of headache and was due to me being confident in my understanding of how comparator compare functioned.

In the future, I would like to get in the habit of testing code with print statements as that how I discovered compare was not just returning -1, 0, 1. I tend to assume the error is due to how my code is structured, but when learning something new I should spend more time understanding how it works exactly instead of jumping directly into using it. This will hopefully save me a lot of time in the future.