

1. To implement a shuffle feature for my linked list, I would create an arraylist that is a copy of my desired LinkedList. Once copied, I would use a for loop for the length of the arraylist, which is equal to that of the LinkedList, and for a random index chosen 0 to arraylist.length, the algorithm would chose a number, create a Node for it, and then add it do the Linked List. It would chose a random index using the the random library, and after selecting the index, the arrayList would pop that index and repeat the process till all the elements are completely randomly shuffled.
2. A trade off between a Dynamic Array and a Linked List is the memory that each respective data structure takes up. While an Array must be stored contiguously, a List of linked Nodes can hold various amounts of data in addresses, rather than taking up one large address. Another trade off between Dynamic Arrays and Linked Lists is the ability to gain access to elements. For a Dynamic Array, we can access any element we desire so long as we know the index it is stored at. However, for a Linked List, we have to iterate through the list until the Node data matches that of our desired object.
3. The thing about HW#1 that I am most proud of is how concentrated and efficient I was with my time when making this program. At the time of writing, it is February 8th and I have completed and tested all my methods. One thing I wish I could do better is write effective pseudo code for the methods I wished to create. Despite going through each method one line at a time, I found that my pseudo code would not always lead me to the the correct answer, or that I would leave out certain details that I would not notice until testing the methods, such as edge cases.
4. External Help:
  - Generic Typing for a Java Method:  
<https://docs.oracle.com/javase/tutorial/extra/generics/methods.html#:~:text=Generic%20methods%20allow%20type%20parameters,methods%20and%20wildcards%20in%20tan%20dem>.

- Index out of bounds exception:  
<https://www.geeksforgeeks.org/array-index-out-of-bounds-exception-in-java/>
  
- == vs .equals():  
<https://www.tutorialspoint.com/differences-between-and-equals-method-in-java>
- ArrayList methods(for shuffling):  
<https://www.geeksforgeeks.org/arraylist-in-java/>
  
- Random library  
<https://www.geeksforgeeks.org/generating-random-numbers-in-java/>