1. In order to use the list as a stack, all inserts would need to be prepended, and all removals would need to be from the Index 0.
2. There are a few benefits to using a linked list instead of an array. First, a linked list can grow, while an array cannot. Second, A linked list does not require contiguous memory space, while an array must be allocated a contiguous block in order to function properly. Lastly, a linked list allows a value to be inserted into the middle of the list without shuffling the other values, while an array would require shuffling values to make room for the new value.
3. In order to write a function that searches fro a pattern either forwards or backwards in a linked list, you would first need to search for the first value. Once a match is found, a test would be performed to see if the next value of the search query matches the next or previous value in the list. This would continue until a match is found, or the end of the list is reached.
4. In order to solve the Josephus problem, the getNext function would be invoked M times per loop. Each time the loop reaches the end, the current node would be removed. This would continue until the size is 1.