

1. Which of the implementations uses more memory? Explain why.

LinkedList implementation uses more memory, each node contains both the values and pointers/references to the consecutive values while the dynamic array simply contains the values stored in a block of contiguous memory.

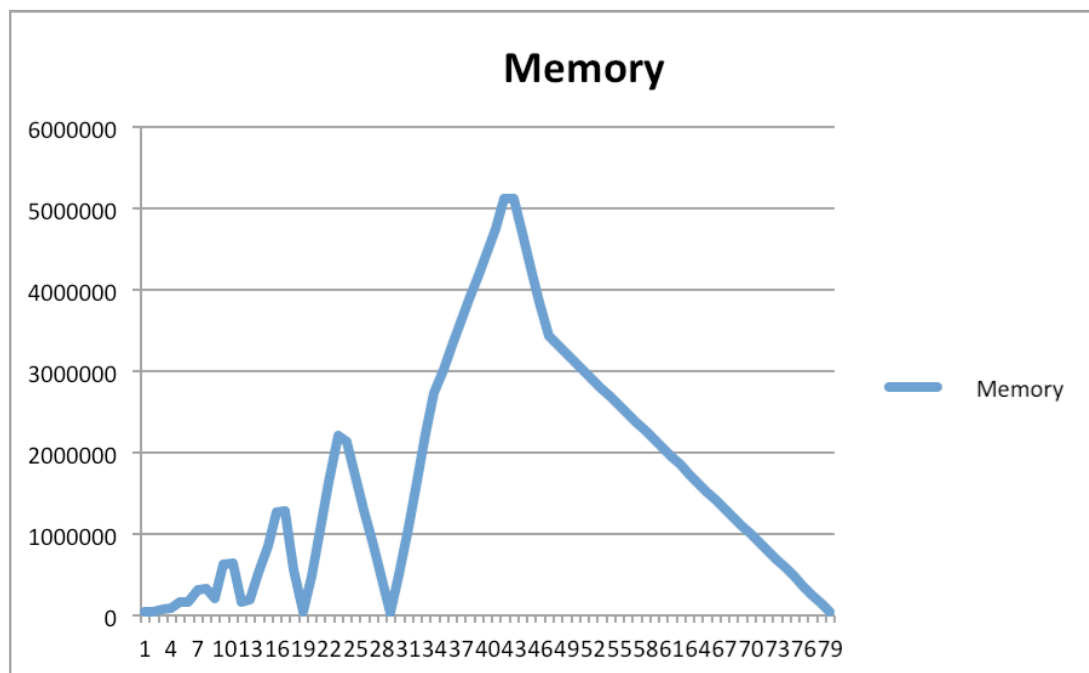
2. Which of the implementations is the fastest? Explain why.

The Dynamic Array, implementation is faster, because traversing through a contiguous block of memory takes less time than traversing a node reading the reference, then accessing the following block of memory which may or may not be adjacent.

3. Would you expect anything to change if the loop performed remove() instead of

Linked List implementation would be faster if the method was changed to remove because, removing elements in an array requires the shifting of all the elements in an array requires the shifting of all the elements to the right, while deleting a node in a Linked List would just be changing the pointers of the adjacent nodes to point to each other and freeing the offending node.

Memory of linked list.



Memory of DynamicArray

