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Method	ArrayList Runtime	Explanation	LinkedList Runtime	Explanation
Boolean add(T element)	O(n)	One for loop to expand and copy array.	O(n)	One while loop to get next nodes
Boolean add(int index, T element)	O(n)	One for loop that finds index and places element	O(n)	One while loop to get next nodes
Void clear()	O(n)	One for loop that goes through array and sets them to null	1	Setting the head to null
Boolean contains(T element)	O(n)	One for loop that goes through array and finds element	O(n)	One while loop to get next nodes and if statement to find data
T get(int index)	1	Used if statement to find element	n	Used If statements to find element at index
Int indexOf(T element)	O(n)	One for loop to go through array and find element	O(n)	One while to get next nodes from head and find element
Boolean isEmpty();	1	Used if statement to determine whether empty or not	1	Used if statement to determine whether node is null or not
Int lastIndexOf(T element)	O(n)	One for loop to go through array and find element	O(n)	One while to get next nodes from head and find element
set(int index, T element)	O(n)	One for loop to go through array and find index then set element	O(n)	One while to get next nodes from head and find index
int size()	1	Returns a class variable that keeps track of size of nodes	1	Returns a class variable that keeps track of size of nodes
void sort(boolean order)	O(n ²)	Nested for loop to place each element in the correct order.	O(n ²)	Nested while loop in a bubble sort type algorithm
boolean remove(T element)	O(n)	Two separate for loops to find element and set to null	O(n)	One while to get next nodes from head and find element
T remove(int index)	O(n ²)	Nested for loop to find index and set to null	O(n)	One while to get next nodes from head and find element