

PART 2 TIME COMPLEXITY ANALYSIS

LinkedList ADT removeFrom function

$T(n) : O(n)$ Linear

Moving from node to node by the order of index amount of times (n) until we found it

LinkedList ADT removeAll function

$T(n) : O(n^2)$ Quadratic

Moving from node to node by the order of index amount of times (n) until we found it and remove it (n)

LinkedList ADT isEmpty function

$T(n) : O(1)$ Constant

1 comparison is performed (if head points to null)