

Created a method called to_set() inside the LinkedList class to convert the LinkedList into a set

A Set is the best collection to remove duplication and its complexity $O(n)$.

Created union method to add all elements together and if the two sets are None then the union is None

Created a method called intersection to add common elements and if one of the sets is None then the intersection is None

Time complexity and space complexity:

$f(n) = O(n)$, where n is the number of elements.