

Problem 6: Union and Intersection

To solve the union and intersection methods of this problem I implemented a set, after so I created a new linked list based on what data the set holds.

Time Space Complexity

union:

Time $\rightarrow O(n)$ because we iterate through LinkedList 1 and 2

Space $\rightarrow O(n)$ because return Linkedlist 1 intersection 2

intersection:

Time $\rightarrow O(n)$ because we iterate through LinkedList 1 and 2

Space $\rightarrow O(n)$ because return Linkedlist 1 intersection 2