

Problem: Remove duplicate values from a linked list.

Inputs: linked list head node, *head*

Outputs: the head node, now pointing to a linked list with no duplicates

```
void removeDuplicates(LinkedList head) {
    HashSet unique;
    LinkedList walk;
    unique = new HashSet();
    unique.add(head.val);
    walk = head;
    while (walk != null && walk.next != null) {
        if (!unique.contains(walk.next.val)) {
            unique.add(walk.next.val);
            walk = walk.next;
        }
        else
            walk.next = walk.next.next;
    }
}
```

Time complexity:

$$\Theta(n) = n$$

Where n is the length of the linked list.