Solution Review: Remove Duplicates From an ArrayList

In this review, solution of the challenge 'Remove Duplicates From an ArrayList' from the previous lesson is provided.

We'll cover the following

- Solution
- How does the above code work?

Solution

```
class DuplicatesRemover {
    public static void removeDuplicates(ArrayList < Character > arrList) {
        for (int i = 0; i < arrList.size(); i++) {
            for (int j = i + 1; j < arrList.size(); j++) {
                if (arrList.get(i).equals(arrList.get(j))) { //check if there is any duplicate
                    arrList.remove(j); //remove duplicate
                    j--; // j is decremented
                }
            }
        }
    }
    public static void main( String args[] ) {
       ArrayList<Character> input = new ArrayList<Character>(Arrays.asList('d', 'c','a', 'b', 'b',
       System.out.println("Array List before calling removeDuplicates");
       for (int i = 0; i < input.size(); i++){
           System.out.print(input.get(i)+ "  ");
       }
       System.out.println();
       removeDuplicates(input);
       System.out.println("Array List after calling removeDuplicates");
       for (int i = 0; i < input.size(); i++){
           System.out.print(input.get(i)+ "  ");
       }
       System.out.println();
    }
}
```

How does the above code work?

- In the above solution code, we have implemented a nested `for loop` for comparing a single element at a time with the entire ArrayList's elements

iteratively.

- If any of the duplicates are found, we use the inbuilt `remove()` method to remove that duplicate element. `j--` decrements the inner for loop's iteration value so that we may tackle three or more consecutive duplicates.

In the next lesson, there will be a quick quiz to test your understanding of the ArrayLists.