

Andreas Landgrebe
Anton K
Brian Graham
Matt

The Structure of the Classes

ListAlgIO Class

We have created a ListAlgIO class where we have our main method that will go thorough the method of generate list from the past class and will be generated into an Array List. that has been imported into the ListAlgIO class.

ListAlg Class

We have created a listAlg class that has a static method called generateList which takes in an ArrayList as an input and returns an ArrayList of ArrayLists containing variations of the input list in which 2 elements have been swapped.

In order to do so, we have created two temporary ArrayLists. The two ArrayLists are the list and then there is the output list. After imported a list, the input lists will go through the size of the full ArrayList and clone onto the inputList. After this. it will add onto the temporary temporary List. After it is added, there will be a setter onto the temp list and then there will be a getter. After this, it will be removed from the temporary list. After this, it will add onto the output list of the Array List and then clear what is left in the temporary list. It will then return the output list