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CSC 225

### Assignment 3

In my code, it is  $O(n+k)$  time complex, but it is a little over time which inversions should be 1000 with  $k$  about 1007. My algorithm uses a  $n$  time complex to build an arraylist to contain the number that should be invert by getting the different between the in position it should be and the number itself. Then use a loop to traverse the arraylist, to get every number difference in the inversion arraylist. Only the difference reduces to 0, we can go to next number difference. To achieve the number swap, it must be positive. There is a problem that too many number seem like override the stack of `int[]`.