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Design Document:

Insertion Sort implementation:

While in the lab we used insertion Sort just with integers, for this assignment we need to implement it with generics. This means the way we compare objects will be different than with integers. In this case, we will have to use comparator and the compareTo method. The comparison of Strings will be of a lexicographic nature.

For us, the design we will be using to develop insertion Sort with a generic comparison is as follows:

```
for( i to length of list, increasing i by 1)
        unsortedValue = value at index i
        index = i
        for( j = i - 1 to 0, decreasing j by 1)
            sortedVal = value at index j
            compareValue = lexicographic comparison
            if(compareValue greater than 0)
                Swap the values inside the list.
            Decrease index by 1
```

For our implementation of the getLargestAnagramGroup we consider that ArrayList will be fundamental for the algorithm. We also believe that a private helper method will be important when implementing the algorithm so that we can avoid big confusing blocks of code. This will also be helpful when testing, because we will be handling smaller amounts of code.

This is how we believe the getLargestGroup algorithm should work:

1. We need to read file and put the original words in a List.
2. Create list with words and sort the characters.
3. Create another list with just one representation of each anagram.
4. Create a list of sets with the original words of each anagram.
5. Then we get the size of the largest set, which will indicate the largest anagram Group.