Programming Assignment 4-4

In this assignment, you will use the recursive merge procedure discussed in the slides as part of a recursive procedure `DivideSort`, which sorts the characters in an input String, and returns the sorted String.

The recursive strategy for `DivideSort`, given a string *s* of characters is:

1. If *s* has length 1 or 0, return *s*
2. Let *mid* be the middle index of *arr* and *len* its length
3. Perform DivideSort on the substring from positions 0 to mid-1 to obtain sorted string *sleft*.
4. Perform DivideSort on the substring from positions mid to len -1 to obtain sorted string *sright*.
5. Merge *sleft* and *sright* and return the result.

Name your class `DivideSort` and the public sorting method
```
String divideSort(String s)
```

Create a `main` method to test your sorting routine.