Programming Assignment 7-2

Here you will implement a recursive sorting routine, applied to the characters within an input String. Name your class `MinSort` and your sorting method `sort`.

The recursive strategy for MinSort is: Given an input String `s` consisting only of characters a-z do the following:

1. Find the position `minpos` of the alphabetically least character in `s`
2. Swap the character in position 0 with the character `ch` in position minpos
3. Remove character `ch` from the string, store it, and call the remaining String `t`
4. Sort `t` and place in storage to the right of the character `ch`
5. Return the stored String.

To find the position of a smallest character in the String, use the recursive min routine presented in the slides in combination with Java's `indexOf` String method. Be sure to handle the cases in which the input String is null or empty.

Test your code in a main method using the input String

```
s = "zwxuabfkafutbbbb"
```

with these lines of code:

```
MinSort ms = new MinSort();
String result = ms.sort("zwxuabfkafutbbbb");
System.out.println(result);
```