

Overview

The purpose of this assignment is to test your basic Java programming skills. In this assignment you will write code that produces all distinct permutations of a supplied string.

Directions

- Write your name and student ID in the comment at the top of the HW0.java file.
- Alter the `printPermutations()` method to return a list of all unique permutations of the supplied string, `s`, in alphabetical order.
- You are allowed to use `Arrays.sort()` and the `java.util.Arrays` package has already been imported for you.
- You may write as many helper functions as you would like but you may not import any other packages and you may not alter the main method (in your final submission).

Testing

- Compile your code from the console by navigating to the directory where your HW0.java file is located and running `'javac HW0.java'`
- If there are no errors, execute the code by running `'java HW0 sample_string'`, replacing `sample_string` with your desired test string.

Notes

- The supplied strings will only be lower case, not necessarily distinct, English letters.
- When testing your code, be mindful of the length of your test input. The number of permutations of a distinct string of length n is $n!$, so your code could take a long time even on small inputs.

- You may alter the main method when testing your code but be sure to revert your changes for your final submission.

Examples

- Supplied string: abc
abc
acb
bac
bca
cab
cba
- Supplied string: bab
abb
bab
bba