Practice with Strings, ArrayLists, and File Reading

Test each of these functions in main() after writing them.

1. Write the function reverseArrayList() which takes an ArrayList and reverses it **in place**. This means you do not make a copy of the ArrayList.

2. Write the function reverseString() which takes a String and returns its reversed version. Note that this cannot be done in place, because Strings in Java are immutable.

3. Fill in the function readWords() which should open the words.txt file, read in all the words into a new ArrayList of Strings, and return the list.

4. Write the function wordsContainingEveryVowel() which returns all the words from the ArrayList parameter that contain every vowel (a, e, i, o, u).

5. Write the function wordsContainingEveryVowel() which returns all the words from the ArrayList parameter that contain every vowel (a, e, i, o, u) exactly once.

6. Write the function lettersInAlphaOrder() which returns all the words from the ArrayList parameter that happen to have all the letters of the word in alphabetical order. For example, the word "empty" satisfies this criteria, because "e" comes before "m," "m" comes before "p," etc. Challenge: can you have your program find the **longest** such word?

7. Write the function findPalindromes() which returns all the words from the ArrayList parameter that happen read the same forwards and backwards. For example, the word "racecar" satisfies this criteria. Challenge: can you have your program find the **longest** such word?

8. Write the function simpleAutocorrect() which takes a list of correctly-spelled words and one single incorrectly-spelled word. The function will search the list of words for all words of the same length as the incorrectly-spelled word, but have exactly one character that differs between the two. For example, if the incorrectly-spelled word is "cst", that will match the correctly-spelled "cat," "cot," and "cut." Return the list of all matching words.