COP 3503 Spring 2022 Section 2 Recitation Program #2

Dobra (https://open.kattis.com/problems/dobra)

For each recitation program, in order to get full credit, you must submit your solution to open.kattis.com and get your solution accepted on all test cases. (Kattis link is included above.) In addition, some of the assignments will have some separate requirements to fulfill based on your code. When submitting your work to Webcourses, please carefully read the corresponding directions document before submitting all of your files.

NOTE: Over the course of the semester, you must submit THREE out of the five recitation programs. It is expected that while you are in recitation, you start working on each of them. But, afterwards, you can choose which three to finish up.

What This Program Is Testing

This problem can be solved via straight brute force. (Note: there are 3 categories of letters: vowels, consonants except L, and L, and 10 open slots, so there are at most 3^{10} options to try.) But, since I want you to practice backtracking, in order achieve full credit, you must cut out of paths that are doomed to fail. (For example, if placing a consonant in an empty slot creates 3 consonants in a row, skip placing it.) A correct solution without backtracking will earn 20 out of 30. 10 pts will be reserved for some level of backtracking.

What to Submit

Please submit the following:

1) Your source file, dobra.java. **(In your code specifically comment where backtracking is occurring!!!)**

2) A screenshot of your solution's accepted status on Kattis. **(This screen shot needs to include BOTH your username and the checkmarks for all of the test cases.)**