COP 3503 Spring 2022 Section 2 Recitation Program #4

Breaking Bad (https://open.kattis.com/problems/breakingbad)

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 is testing the two-coloring problem, which was briefly mentioned in class. The algorithm to solve the problem can be either a slight modification of DFS or BFS.

Notes About Time Limit
If both a Scanner and regular println are used, then you're likely to be very close to the maximum Kattis time limit, or slightly over it. (Using a FastScanner and a StringBuffer in place of Scanner and many print statements improve the run time from .96 seconds to .36 seconds for one solution that was tested.) To that end, it may be useful to use either or both of these items to improve the wiggle room with the time limit. Please look at Java's documentation to learn more about StringBuffer. (Idea is to build a large StringBuffer efficiently then use one print to print it out.) The FastScanner class written by the programming team will be posted as a separate file for thi assignment.

What to Submit
Please submit the following:

1) Your source file, breakingbad.java.

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.)**