

COP 3503 Spring 2022 Section 2 Recitation Program #5

Tight Words (<https://open.kattis.com/problems/tight>)

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 by dynamic programming. The algorithm to solve it is closest to the algorithm to solve the World Series Problem, but this is a different algorithm. The DP table will have two indexes, one storing the slot being filled in and the other storing the last “letter”/”character” in a word being filled in. The code will be very short, but the bulk of the time will be spent on paper devising the solution. You may implement your solution with either traditional dynamic programming with a 2D array and double for loop, OR you may use the technique of memorization to implement the same solution idea.

What to Submit

Please submit the following:

- 1) Your source file, tight.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.)**