A Recursion Checklist II

Here's the rest of the recursion checklist.

☐ Have You Covered All Possibilities?

Does the simplification process always reach the base case, or **have you left out some of the possibilities**? A common error is forgetting one of the base-cases. You need to check the empty string in the `isPalindrome()` function, as well as the single-character string. Since the function reduces the size of the string by two each time, only having the one-character base case, would mean some strings would fail.

☐ Are Sub-problems Identical in Form?

Are the recursive sub-problems **truly identical in form to the original?** It is essential that the sub-problems be of the same form. If the recursive calls change the nature of the problem then the entire process can break down.

☐ Are You a Believer?

When you apply the recursive leap of faith, do the solutions to the recursive sub-problems **provide a complete solution to the original problem**? Work through all the steps in the current function call, but assume that every recursive call returns the correct answer. If this process yields the right solution, your program should work.