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Java

22. Generate Parentheses

Medium

13691

520

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Given n pairs of parentheses, write a function to *generate all combinations of well-formed parentheses*.

Example 1:

Input: $n = 3$

Output: ["((()))", "(()())", "(())()", "()(())", "()()()"]

Example 2:

Input: $n = 1$

Output: ["()"]

Constraints:

- $1 \leq n \leq 8$

Accepted 1,112,825

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```
1 class Solution {
2     public List<String>
3         generateParenthesis(int n) {
4         List<String> result = new ArrayList<>();
5
6         generateParenthesis(0, 0, n, result);
7         return result;
8     }
9     private void generateParenthesis(int open, int close, int n, List<String> result) {
10        if (open == n) {
11            result.add(new String(open));
12        }
13        if (open < n) {
14            generateParenthesis(open + 1, close, n, result);
15        }
16        if (close < n) {
17            generateParenthesis(open, close + 1, n, result);
18        }
19    }
20 }
21
```

Testcase Run Code Re

Accepted Runtime

Your input 3

Output ["((()))"]

Expected ["((()))"]

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