

Problem 22: Generate Parentheses

Problem Information

Difficulty: Medium

Acceptance Rate: 77.91%

Paid Only: No

Tags: String, Dynamic Programming, Backtracking

Problem Description

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 <= n <= 8`

Code Snippets

C++:

```
class Solution {
public:
    vector<string> generateParenthesis(int n) {
        }
    };
}
```

Java:

```
class Solution {  
    public List<String> generateParenthesis(int n) {  
        }  
        }
```

Python3:

```
class Solution:  
    def generateParenthesis(self, n: int) -> List[str]:
```