LongestValidParentheses.java

```
1    package com.example.dynamicProgramming;
2
3    public class LongestValidParentheses {
4
5        public int getLongestValidParentheses(String s) {
6  3        if (s == null || s.length() < 2) {
7            return 0;
8        }
9        char[] chars = s.toCharArray();
10       int n = chars.length;
11       int[] res = new int[n];
12       res[0] = 0;
13 2     res[1] = chars[1] == ')' && chars[0] == '(' ? 2 : 0;
14
15       int max = res[1];
16
17 2     for (int i = 2; i < n; ++i) {
18 1         if (chars[i] == ')') {
19 2             if (chars[i - 1] == '(') {
20 2                 res[i] = res[i - 2] + 2;
21             } else {
22 3                 int index = i - res[i - 1] - 1;
23 3                 if (index >= 0 && chars[index] == '(') {
24                     // ()(())
25 7                     res[i] = res[i - 1] + 2 + (index - 1 >= 0 ? res[index - 1] : 0);
26                 }
27             }
28         }
29         max = Math.max(max, res[i]);
30     }
31
32 1     return max;
33   }
34 }
```

Mutations

6	1. negated conditional → KILLED 2. negated conditional → KILLED 3. changed conditional boundary → KILLED
13	1. negated conditional → KILLED 2. negated conditional → KILLED
17	1. negated conditional → KILLED 2. changed conditional boundary → KILLED
18	1. negated conditional → KILLED
19	1. negated conditional → KILLED 2. Replaced integer subtraction with addition → KILLED
20	1. Replaced integer subtraction with addition → KILLED 2. Replaced integer addition with subtraction → KILLED
22	1. Replaced integer subtraction with addition → KILLED 2. Replaced integer subtraction with addition → KILLED 3. Replaced integer subtraction with addition → KILLED
23	1. changed conditional boundary → KILLED 2. negated conditional → KILLED 3. negated conditional → KILLED
25	1. Replaced integer subtraction with addition → KILLED 2. Replaced integer subtraction with addition → KILLED 3. Replaced integer addition with subtraction → KILLED 4. Replaced integer subtraction with addition → KILLED 5. Replaced integer addition with subtraction → KILLED 6. negated conditional → KILLED 7. changed conditional boundary → SURVIVED
32	1. replaced int return with 0 for com/example/dynamicProgramming/LongestValidParentheses::getLongestValidParentheses → KILLED

Active mutators

- CONDITIONALS_BOUNDARY
- EMPTY_RETURNS
- FALSE_RETURNS
- INCREMENTS
- INVERT_NEGS
- MATH
- NEGATE_CONDITIONALS
- NULL_RETURNS
- PRIMITIVE_RETURNS
- TRUE_RETURNS
- VOID_METHOD_CALLS

Tests examined

- com.example.dynamicProgramming.LongestValidParenthesesTest.test(com.example.dynamicProgramming.LongestValidParenthesesTest) (0 ms)

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