32. Longest Valid Parentheses ★

Total Accepted: **74841**   Total Submissions: **327669**   Difficulty: **Hard**

Given a string containing just the characters `'('` and `')'`, find the length of the longest valid (well-formed) parentheses substring.

For `"(()"`, the longest valid parentheses substring is `"()"`, which has length = 2.

Another example is `")()())"`, where the longest valid parentheses substring is `"()()"`, which has length = 4.

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C++   ⟳ </>

```cpp
class Solution {
public:
    int longestValidParentheses(string s) {
        int max = 0, lpivot = -1, rpivot = s.size();
        std::stack<int> stack;
        for (int i = 0, n = s.size(); i < n; ++i) {
            if (s[i] == '(') {
                stack.push(i);
            }
            else {
                if (!stack.empty()) {
                    stack.pop();
                }
                else {
                    max = std::max(i - lpivot - 1, max);
                    lpivot = i;
                }
            }
        }
        while (!stack.empty()) {
            auto index = stack.top();
```

```
22              stack.pop();
23              max = std::max(max, rpivot - index - 1);
24              rpivot = index;
25          }
26          max = std::max(max, rpivot - lpivot - 1);
27          return max;
28      }
```

Custom Testcase ☐

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