AlgoExpert Quad Layout JavaScript 12px Sublime Monokai 00:00:00

Prompt Scratchpad Our Solution(s) Video Explanation Run Code

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Solution 1 Solution 2
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_{\rm 1} \, // Copyright 0 2020 AlgoExpert, LLC. All rights reserved.
 3 // O(n^3) time | O(n^2) space
     function palindromePartitioningMinCuts(string) {
       const palindromes = new Array(string.length).fill(1).map(row => []);
       for (let i = 0; i < string.length; i++) {</pre>
         for (let j = i; j < string.length; j++) {
  palindromes[i][j] = isPalindrome(string.slice(i, j + 1));</pre>
10
11
       const cuts = new Array(string.length);
12
       cuts.fill(Infinity);
       for (let i = 0; i < string.length; i++) {
  if (palindromes[0][i]) {</pre>
13
14
15
            cuts[i] = 0;
16
          } else {
17
            cuts[i] = cuts[i - 1] + 1;
            for (let j = 1; j < i; j++) {
18
19
               \textbf{if} \ (\texttt{palindromes}[\texttt{j}][\texttt{i}] \ \&\& \ \mathsf{cuts}[\texttt{j} - \texttt{1}] \ + \ \texttt{1} \ < \ \mathsf{cuts}[\texttt{i}]) \ \{ \\
20
21
                cuts[i] = cuts[j - 1] + 1;
22
23
24
25
       return cuts[cuts.length - 1];
26 }
27
28 function isPalindrome(string) {
29
       let leftIdx = 0;
30
       let rightIdx = string.length - 1;
31
       while (leftIdx < rightIdx) {</pre>
32
         if (string[leftIdx] !== string[rightIdx]) return false;
33
          leftIdx++;
34
          rightIdx--;
35
36
       return true;
37 }
```

39 exports.palindromePartitioningMinCuts = palindromePartitioningMinCuts;

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