AlgoExpert Quad Layout C# 12px Sublime Monokai 00:00:00

Prompt Scratchpad Our Solution(s) Video Explanation Run Code

Solution 1 Solution 2

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```
1\, // Copyright @ 2020 AlgoExpert, LLC. All rights reserved.
 3 using System;
 5 public class Program {
     // O(n^2) time | O(n^2) space
      \textbf{public static int} \ \ \textbf{PalindromePartitioningMinCuts(string \ str)} \ \ \{
        bool[,] palindromes = new bool[str.Length,str.Length];
         for (int i = 0; i < str.Length; i++) {</pre>
           for (int j = 0; j < str.Length; j++) {
10
11
            if (i == j) {
               palindromes[i,j] = true;
12
13
             } else {
14
               palindromes[i,j] = false;
15
16
17
18
         for (int length = 2; length < str.Length + 1; length++) {</pre>
           for (int i = 0; i < str.Length - length + 1; i++) {</pre>
19
            int j = i + length - 1;
20
21
             if (length == 2) {
22
               palindromes[i,j] = (str[i] == str[j]);
23
             } else {
24
               palindromes[i,
25
                 j] =
26
                 (str[i] == str[j] && palindromes[i + 1,j - 1]);
27
28
29
30
         int[] cuts = new int[str.Length];
         Array.Fill(cuts, Int32.MaxValue);
31
         for (int i = 0; i < str.Length; i++) {
   if (palindromes[0,i]) {</pre>
32
33
34
            cuts[i] = 0;
35
           } else {
36
             cuts[i] = cuts[i - 1] + 1;
37
             for (int j = 1; j < i; j++) \{
38
                \textbf{if} \text{ (palindromes[j,i] \&\& cuts[j - 1] + 1 < cuts[i]) } \{ \\
                 cuts[i] = cuts[j - 1] + 1;
39
40
41
42
43
44
         return cuts[str.Length - 1];
45
46 }
```