

Solution 1

Solution 2

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Program {
4     // O(n^2) time | O(n^2) space
5     func palindromePartitioingMinCuts(_ string: String) -> Int {
6         var palindromes = string.map { _ in Array(repeating: false, count: string.count) }
7
8         for i in 0 ..< string.count {
9             palindromes[i][i] = true
10        }
11
12        for length in stride(from: 2, through: string.count, by: 1) {
13            for i in stride(from: 0, through: string.count - length, by: 1) {
14                let j = i + length - 1
15
16                let iStringIndex = string.index(string.startIndex, offsetBy: i)
17                let jStringIndex = string.index(string.startIndex, offsetBy: j)
18
19                if length == 2, string[iStringIndex] == string[jStringIndex] {
20                    palindromes[i][j] = true
21                } else if palindromes[i + 1][j - 1], string[iStringIndex] == string[jStringIndex] {
22                    palindromes[i][j] = true
23                }
24            }
25        }
26
27        var cuts = Array(repeating: Int.max, count: string.count)
28
29        for i in 0 ..< string.count {
30            if palindromes[0][i] {
31                cuts[i] = 0
32            } else {
33                cuts[i] = cuts[i - 1] + 1
34
35                for j in 1 ..< i {
36                    if palindromes[j][i], cuts[j - 1] + 1 < cuts[i] {
37                        cuts[i] = cuts[j - 1] + 1
38                    }
39                }
40            }
41        }
42
43        return cuts[string.count - 1]
44    }
45 }
46
```

