**Problem :** [**https://practice.geeksforgeeks.org/problems/palindromic-patitioning4845/1#**](https://practice.geeksforgeeks.org/problems/palindromic-patitioning4845/1#)

**Approach :**

-> Focus on the part : “Every substring has to be a palindrome”

-> So when we start the partitioning in a string like :

“abaabalyylaba”

-> We know that we have to keep moving till we find a palindromic prefix.

First one we encounter is “aba”, second time “abaaba”, amongst these 2 options we can’t say that we will greedily take the bigger one, bcoz for that we need **2 cuts abaaba lyyl aba,**

,in the other option we can do with **2 cuts : aba abalyylaba,** also we can’t say that taking the smaller one is always good, e.g abaaba .

-> So for every palidromic prefix, we try to make a cut there, and then recur for the remaining substring to find the min number of cuts there with the same logic.

-> For this we can calculate answers from behind.Also **we need to precalculate for every subtring whether it’s a palindrome or not, by the first-last-middle method,** means for a string to be a palindrome , the first and last characters have to be same, and the middle string should be a palindrome.

-> After this go from behind and find for every suffix min number of cuts by cutting at all possible palindromic prefixes, and the answer for right part would already be available.

**=> Time = O(n^2).**

**Code :** [**https://practice.geeksforgeeks.org/viewSol.php?subId=a5bcc98c719d45a1d2cb0a2abd90c0af&pid=704187&user=alaymehta1**](https://practice.geeksforgeeks.org/viewSol.php?subId=a5bcc98c719d45a1d2cb0a2abd90c0af&pid=704187&user=alaymehta1)