

DescriptionHintsSubmissionsDiscussionsNotes

Destroy Coloured Gemstones

4 sec256000KB100

DifficultyTime LimitMemoryScore

80/80 XP

30/30

Description

You are given an array of colored gemstones. In one second, you can remove exactly one continuous substring of colored gemstones that is a palindrome. You have to find the minimum number of seconds needed to destroy all the gemstones.

Input Format

The first line of the input contains one integer T – the number of test cases. Then T test cases follow.

The first line of each test case contains one integer N – the length of the array.

The second line of each test case contains N space-separated integers.

Output Format

For each test case, print the minimum number of seconds needed to destroy all the gemstones.

Constraints

$1 \leq T \leq 200$

$1 \leq N \leq 100$

$1 \leq A_i \leq N$

Sample Input 1

3
4
1 3 3 1
3

Copy

C++1400:00:0012 px

```
1 #include<bits/stdc++.h>
2 using namespace std;
3 int n;
4 int arr[101];
5 int dp[101][101];
6 int rec(int l,int r){
7     if(l+1==r && arr[l]==arr[r]){
8         return 1;
9     }
10    else if(l+1==r){
11        return 2;
12    }
13    if(l==r){
14        return 1;
15    }
16    if(l>r){
17        return 0;
18    }
19
20    if(dp[l][r]!=-1){
```

Sample TestsManual Tests

Test Case 1

Input

3
4
1 3 3 1
3
2 4 3
11
1 3 2 3 2 4 3 3 4 3 1

Output

Click on Run On Sample to view the output

Desired Output

Console

Run on Sample