



Palindrome arrays

locked

by talentiohyd

Problem

Submissions

Leaderboard

Discussions

- Vikas is an expert in playing with arrays and subarrays.
- One day he went to his teacher's house for her birthday party. In the party his teacher asked him to solve a problem;-
- You are given an array of length n . Now you have to destroy this array.
- The rule to destroy this array:
 1. You have to choose a subarray (could be of length n) in the array, such that the subarray should be a palindrome, remove this subarray. Iteratively, keep removing palindromes from array until there are no palindromes left. For Example: '1 2 5 2 6 7' is an array, remove subarray '2 5 2', then remaining array be '1 6 7'.
 2. It will take 1 second to remove a subarray.
- Here Vikas's task is to destroy this array in minimum number of seconds. But Vikas enjoying his teacher's party so he asked you to solve this problem.

Input Format

- The first line contains the test cases t ($1 \leq t \leq 25$).
- The second line of input contains a single integer n ($1 \leq n \leq 500$) the length of array.
- The third line contains n space-separated integers, the i -th of which is A_i ($1 \leq A_i \leq n$).

Constraints

- Sample input:
- Input:
 - 1
 - 7
 - 1 4 4 2 3 2 1
- Output:
 - 2
- Explanation:
 - In the sample input, to achieve the optimal time of 2 seconds, destroy palindrome 4 4 first and then destroy palindrome 1 2 3 2 1.

Output Format

- Print a single integer — the minimum number of seconds needed to destroy the entire array.

Sample Input 0

```
10
3
1 2 1
```

3
1 2 3
7
1 4 4 2 3 2 1
1
1
2
1 1
2
1 2
8
1 2 1 3 4 1 2 1
50
5 7 5 10 7 9 1 9 10 2 8 3 5 7 3 10 2 3 7 6 2 7 1 2 2 2 4 7 3 5 8 3 4 4 1 6 7 10 5 4 8 1 9 5 5 3 4 4 8 3
50
13 17 20 5 14 19 4 17 9 13 10 19 16 13 17 2 18 3 1 9 19 4 19 10 17 12 16 20 10 11 15 10 3 19 8 6 2 8 9 15 13 7 8
8 5 8 15 18 9 4
50
22 19 14 22 20 11 16 28 23 15 3 23 6 16 30 15 15 10 24 28 19 19 22 30 28 1 27 12 12 14 17 30 17 26 21 26 27 1 11
23 9 30 18 19 17 29 11 20 29 24

Sample Output 0

1
3
2
1
1
2
2
21
28
25

[f](#) [t](#) [in](#)

Submissions: 107



Max Score: 20



Difficulty: Medium

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Current Buffer (saved locally, editable)  

C  

```
1 #include <stdio.h>
2 #include <string.h>
3 #include <math.h>
4 #include <stdlib.h>
5
6 int main() {
7
8     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
9     return 0;
10 }
11
```

Line: 1 Col: 1

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