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# Jewel Game

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You're playing a game in which you're given a sequence of various jewels. If adjacent jewels are of the same type, you can gain 1 point by collecting them (thus removing them from the sequence).

Given a string of lowercase English letters, where each letters represents a different type of jewel, find the maximum score you can obtain by playing the game optimally.

For example, if **jewels** = "abccbda", you can play as follows:

- 1. Collect "cc". These jewels are removed, the string becomes "abbda", and your score becomes 1.
- 2. Collect "bb". The string becomes "ada", and your score becomes 2.

After this, it is impossible to collect any more jewels. Therefore, the answer is 2.

#### **Input Format**

The first line contains an integer, t, denoting the number of test cases.

Each test contains a single string, jewels.

#### Constraints

- $1 \le T \le 10$
- $1 \le \text{length of } jewels \le 10^4$

# **Output Format**

Print  $m{t}$  lines. Each line should contain a single integer denoting the maximum score for the corresponding test case.

### Sample Input 0

2 abcddcbd abcd

## Sample Output 0

3

0

# Explanation 0

In the first case, we first collect "dd". The jewels now become "abccbd". Then collect "cc" followed by "bb". The jewels now become "ad", and no more jewels can be collected. The final score is **3**, which is the maximum score possible.

In the second case, it is not possible to collect any jewels.

f ⊌ in

Contest ends in 18 hours

Submissions: 2058

Max Score: 30 Difficulty: Medium

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```
Current Buffer (saved locally, editable) & 40
                                                                        lava 8
 1 → import java.io.*;
 2 import java.math.*;
 3 import java.security.*;
   import java.text.*;
 5
    import java.util.*;
    import java.util.concurrent.*;
    import java.util.function.*;
   import java.util.regex.*;
 8
   import java.util.stream.*;
   import static java.util.stream.Collectors.joining;
   import static java.util.stream.Collectors.toList;
11
12
13 → class Result {
14
15 -
         * Complete the 'getMaxScore' function below.
16
17
         * The function is expected to return an INTEGER.
18
19
         * The function accepts STRING jewels as parameter.
20
21
22
        public static int getMaxScore(String jewels) {
23
        // Write your code here
24
25
        }
26
27
28
29 → public class Solution {
        public static void main(String[] args) throws IOException {
30 🔻
            BufferedReader bufferedReader = new BufferedReader(new InputStreamReader(System.in));
31
            BufferedWriter bufferedWriter = new BufferedWriter(new
32
    FileWriter(System.getenv("OUTPUT_PATH")));
33
            int t = Integer.parseInt(bufferedReader.readLine().trim());
34
35
            IntStream.range(0, t).forEach(tItr -> {
36 ▼
37 ▼
                try {
                     String jewels = bufferedReader.readLine();
38
39
40
                     int ans = Result.getMaxScore(jewels);
41
42
                     bufferedWriter.write(String.valueOf(ans));
43
                     bufferedWriter.newLine();
44
                 } catch (IOException ex) {
45
                     throw new RuntimeException(ex);
46
                 }
47
            });
48
            bufferedReader.close();
49
50
            bufferedWriter.close();
        }
51
52
   }
53
                                                                                                Line: 1 Col: 1
```

<u>♣ Upload Code as File</u> Test against custom input

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Run Code

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