Problem D
Dazzling Card Set

Slay the Spire is a popular video game that combines elements of roguelike and deck-building genres. It is a tactical game in which players navigate through a series of levels, fight enemies, and collect cards to build their deck. The goal is to climb to the top of the tower by defeating powerful bosses along the way. Each playthrough is unique as players encounter different cards, relics, and events that shape their strategy. *Slay the Spire* has received praise for its challenging gameplay, deep tactics, and replayability.

In the current playthrough, Lokk has a hand of n attack cards. The i-th card has a damage value of a_i. Lokk is playing the latest version of *Slay the Spire* and has acquired a new relic called *Radiance*. *Radiance* has the following effect: if in this turn, the cards you play are *Dazzling*, then after this turn, the *Vulnerable* status will be applied to all enemies.

The cards played are called *Dazzling* if the played cards are adjacent in the hand and no two played cards have the same damage value. In other words, if there exists two indices l and r ($1 \le l \le r \le n$), such that:

- all cards from position l to r are played in the current turn,
- no other card is played, and
- $a_i \neq a_j$ for all $l \le i < j \le r$.

then the played cards are called *Dazzling*.

With *Radiance* in hand, Lokk wants to use this relic as effectively as possible. Given the list of damage values of Lokk's cards in hand in the order they appear in the hand, help Lokk count the number of possible plays in the current turn for *Radiance* to take effect. Two plays are considered different if there exists an index i such that card i is played in one play but not in the other.

Input

The first line contains a positive integer t — the number of test cases. The description of each test case follows.

The first line of each test case contains an integer n ($1 \le n \le 200\,000$) — the number of cards in Lokk's hand.

The second line of each test case contains n integers $a_1, a_2, \ldots, a_n$ ($1 \le a_i \le n$) — the damage values of Lokk's cards in hand.

It is guaranteed that the sum of n over all test cases does not exceed $500\,000$.

Output

For each test case, print a single integer, the number of possible plays for the *Radiance* to take effect after this turn.

Sample explanation

In the first example, Lokk has a hand of cards with damage values $[4, 1, 1, 6, 2, 2]$. There are 10 ways to choose the *Dazzling* card sequences, as shown by the underlined card sequences below:

$[\underline{4}, 1, 1, 6, 2, 2]$	$[4, \underline{1}, 1, 6, 2, 2]$	$[4, 1, \underline{1}, 6, 2, 2]$	$[4, 1, 1, \underline{6}, 2, 2]$	$[4, 1, 1, 6, \underline{2}, 2]$
$[4, 1, 1, 6, 2, \underline{2}]$	$[\underline{4, 1}, 1, 6, 2, 2]$	$[4, 1, \underline{1, 6}, 2, 2]$	$[4, 1, 1, \underline{6, 2}, 2]$	$[4, 1, \underline{1, 6, 2}, 2]$

The card sequence $[1, 1, 6]$ is not considered *Dazzling*, because it contains two cards with damage points of 1.

In the second example, it is not possible to choose a *Dazzling* card sequence with multiple cards.

In the third example, in addition to the card sequences consisting of only one card, the card sequences consisting of two consecutive cards are also considered *Dazzling*.

Sample Input 1	Sample Output 1
3 6 4 1 1 6 2 2 3 2 2 2 9 6 9 6 9 6 9 6 9 6	10 3 17