

The 2025 ICPC Vietnam National Contest



HCMC University of Technology – 09 November 2025

Difficulty Distance

Mimi, a rhythm game released in 201x, has been attracting more and more players - from young teenagers to adults. As a social-based game, it requires players to join in pairs and choose the same song to play together (note that in this fictional version of the game, each song only has only one level of difficulty).

At a certain arcade, there is a club of n Mimi players who are about to participate in a practice session. The i-th player has a preferred song difficulty level a_i , which also represents their **skill** level. No two players have the same skill level.

The team leader wants to select a subset of players and organize them into pairs such that the difference in skill levels between the two players in each pair is at most 1. Formally, suppose that $x_0(i)$, $x_1(i)$ are the indices of the players in the *i*-th pair; then it must hold that $|a_{x_0(i)} - a_{x_1(i)}| \le 1$.

The team leader aims to form as many pairs of players as possible for the practice session. Your task is to count the number of ways to form the maximum number of pairs. Two ways are considered different iff there exists at least one pairs of players that appear in one way but not in the other.

Input

Each test contains multiple test cases. The first line contains the number of test cases τ (1 \leq $\tau \leq 2 \cdot 10^5$). The description of the test cases follows.

- The first line contains an integer n $(1 \le n \le 2 \cdot 10^5)$ the number of players in the club.
- The second line contains n integers a_1, a_2, \ldots, a_n $(1 \le a_i \le 10^9)$ the skill level of the players. It is guaranteed that all skill levels are distinct.

It is guaranteed that the sum of n over all test cases does not exceed $2 \cdot 10^5$.

Output

For each test case, output a single integer — the number of ways to form the maximum number of pairs, modulo 998 244 353.



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Sample Input 1	Sample Output 1
3	1
6	2
2 4 5 7 9 10	1
6	
1 3 4 9 8 5	
2	
1 100	

Sample Explanation

In the first test case, one can select players with skill levels 4, 5, 9 and 10 and form two pairs: (4,5) and (9,10). It can be shown that this is the only way to form two pairs, and it is impossible to form more than two pairs.

In the second test case, there are 2 ways to form two pairs of players:

- [(3,4),(8,9)]
- [(4,5),(8,9)]

In the third test case, it is impossible to form any pair of players, and the number of ways to form zero pairs is 1.