Problem H. Equal MEX

Input file:	*standard input*
Output file:	*standard output*
Time limit:	2 seconds
Memory limit:	256 mebibytes

You have an array $a_1, a_2, \ldots, a_n$.

You need to find the number of ways to split it into non-empty subsegments, such that all MEXes of these subsegments are equal. MEX of subsegment $[l \ldots r]$ is equal to minimal non-negative integer x, such that x is not present at this segment.

As this number may be very big, you only need to output it modulo $998\,244\,353$.

Input

The first line of input contains one integer t ($1 \le t \le 300\,000$): the number of test cases.

The first line of each test case contains one integer n ($1 \le n \le 300\,000$): the number of integers in the given array. The next line of each testcase contains n space-separated integers $a_1, a_2, \ldots, a_n$ ($0 \le a_i \le n$): the given array.

It is guaranteed that the sum of n is at most $300\,000$.

Output

For each test case one integer: the number of ways to split a given array into non-empty subsegments with equal MEX, modulo $998\,244\,353$.

Example

standard input	standard output
4	1
6	3
0 0 0 1 1 1	8
5	4
0 1 0 1 0	
4	
0 0 0 0	
3	
3 3 3	