Problem H. Mah-jong

Time limit: 3 seconds
Memory limit: 1024 megabytes

A positive integer multiset s is a "*Pong*" if $s = \{x, x, x\}$ for some positive integer x.

A positive integer multiset s is a "*Chow*" if $s = \{x, x+1, x+2\}$ for some positive integer x.

A positive integer multiset is a "*Mahjong*" if it can be divided into some (possibly zero) "*Pong*"s and some (possibly zero) "*Chow*"s. Note that the definition is **different** from the original Mahjong.

Now you are given n integers $a_1, a_2 \ldots a_n$. Your task is to calculate the number of intervals $[l, r](1 \le l \le r \le n)$ such that the multiset $\{a_l, a_{l+1} \ldots a_r\}$ is a "*Mahjong*".

Input

The input contains multiple test cases. The first line contains one integer T ($1 \le T \le 100$), representing the number of test cases.

For each test case, the first line contains one integer n ($1 \le n \le 10^5$), representing the number of integers. The following line contains n integers $a_1, a_2 \ldots a_n$ ($1 \le a_i \le 8$).

It is guaranteed that the sum of n does not exceed 10^5.

Output

For each test case, output one integer, representing the answer.

Example

standard input	standard output
5 4 1 1 1 1 6 1 2 3 1 2 3 7 6 5 8 7 6 3 2 8 1 2 1 2 1 2 1 3 9 2 2 4 4 1 1 1 3 3	2 5 1 3 2