

Problem M. Managing Difficulties

Time limit: 2 seconds
Memory limit: 512 megabytes

Every day a new programming problem is published on Codehorses. Thus, n problems will be published in the following n days: the difficulty of the i -th problem is a_i .

Polycarp wants to choose exactly three days i , j and k ($i < j < k$) so that the difference of difficulties on the day j and the day i is equal to the difference of difficulties on the day k and day j . In other words, Polycarp wants equality $a_j - a_i = a_k - a_j$ to be true.

Determine the number of possible ways for Polycarp to choose the three days in the desired way.

Input

The first line contains an integer t — the number of test cases in the input ($1 \leq t \leq 10$). Then t test case descriptions follow.

The first line of a test case contains an integer n — the number of the days ($3 \leq n \leq 2000$).

The second line of the test case contains n integers a_1, a_2, \dots, a_n , where a_i is the difficulty of the problem on the i -th day ($1 \leq a_i \leq 10^9$).

Output

Output t integers — the answers for each of the test cases in the input, in the order they are given. The answer to a test case is the number of triples of indices i , j , and k such that $1 \leq i < j < k \leq n$ and $a_k - a_j = a_j - a_i$.

Example

standard input	standard output
4	1
5	1
1 2 1 2 1	4
3	5
30 20 10	
5	
1 2 2 3 4	
9	
3 1 4 1 5 9 2 6 5	