

Problem E. Arithmetic Sequence

Input file: *standard input*
 Output file: *standard output*
 Time limit: 1 seconds
 Memory limit: 64 mebibytes

A sequence b_1, b_2, \dots, b_n are called (d_1, d_2) -arithmetic sequence if and only if there exist i ($1 \leq i \leq n$) such that for every j ($1 \leq j < i$), $b_{j+1} = b_j + d_1$ and for every j ($i \leq j < n$), $b_{j+1} = b_j + d_2$.

Teacher Mai has a sequence a_1, a_2, \dots, a_n . He wants to know how many intervals $[l, r]$ ($1 \leq l \leq r \leq n$) there are that a_l, a_{l+1}, \dots, a_r are (d_1, d_2) -arithmetic sequence.

Input

First line of the input contains one integer T ($1 \leq T \leq 15$) — number of test cases.

For each test case, the first line contains three numbers n, d_1, d_2 ($1 \leq n \leq 10^5, |d_1|, |d_2| \leq 1000$), the next line contains n integers a_1, a_2, \dots, a_n ($|a_i| \leq 10^9$).

Output

For each test case, print the answer.

Examples

standard input	standard output
2	12
5 2 -2	5
0 2 0 -2 0	
5 2 3	
2 3 3 3 3	