# D. Exam in MAC

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

The Master's Assistance Center has announced an entrance exam, which consists of the following.

The candidate is given a set $s$ of size $n$ and some strange integer $c$. For this set, it is needed to calculate the number of pairs of integers $(x, y)$ such that $0 \le x \le y \le c$, $x + y$ **is not** contained in the set $s$, and also $y - x$ **is not** contained in the set $s$.

Your friend wants to enter the Center. Help him pass the exam!

## Input

Each test consists of multiple test cases. The first line contains a single integer $t$ ($1 \le t \le 2 \cdot 10^4$) — the number of test cases. The description of the test cases follows.

The first line of each test case contains two integers $n$ and $c$ ($1 \le n \le 3 \cdot 10^5$, $1 \le c \le 10^9$) — the size of the set and the strange integer.

The second line of each test case contains $n$ integers $s_1, s_2, \ldots, s_n$ ($0 \le s_1 < s_2 < \ldots < s_n \le c$) — the elements of the set $s$.

It is guaranteed that the sum of $n$ over all test cases does not exceed $3 \cdot 10^5$.

## Output

For each test case, output a single integer — the number of suitable pairs of integers.

### Example

input

```
8
3 3
1 2 3
1 179
57
4 6
0 3 5 6
1 1
1
5 10
0 2 4 8 10
5 10
1 3 5 7 9
4 10
2 4 6 7
3 1000000000
228 1337 998244353
```

output

```
3
16139
10
2
33
36
35
499999998999122959
```

## Note

In the first test case, the following pairs are suitable: $(0, 0)$, $(2, 2)$, $(3, 3)$.

In the third test case, the following pairs are suitable: $(0, 1)$, $(0, 2)$, $(0, 4)$, $(1, 3)$, $(2, 6)$, $(3, 4)$, $(3, 5)$, $(4, 5)$, $(4, 6)$, $(5, 6)$.