6982 Dhoni's Bowlers

The Indian team is known for their strong batting and sloppy bowling. The captain M.S. Dhoni is concerned about this issue. He wants to address this by pairing up bowlers who have good economy rates.

He has all the bowlers' economy rates as integers. Unfortunately, these are T20 figures and to convert them to ODI format, he wants to pair up bowlers in such a way that the sum of the economy rates of two bowlers, *modulo* M, is always less than or equal to X.

Given the economy rates, M and X, can you tell him how many such ordered pairs are possible?

Note: The pair of bowlers chosen by him can be the same. Yeah, Dhoni has won a cup in all limited over formats, but he definitely needs to sharpen his math skills.

Input

The first line contains the number of test cases T. Each test case contains N, M and X on the first line, followed by N space separated integers $A[1..N]$ on the second line.

Output

Output T lines, containing the answer for the corresponding test case.

Constraints:

- $1 \leq T \leq 10$
- $1 \leq N \leq 100000$
- $0 \leq X < M \leq 100000$
- $0 \leq A[i] \leq 1000000000$

Explanation: For the first example, the valid pairs are (1, 1), (1, 2), (2, 1), (2, 3), (3, 2), (3, 3).

Sample Input

```
2
3 5 3
1 2 3
4 7 4
31 12 11 17
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Sample Output

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6
12
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