Problem 3: Programming Pairs

Input File: *pairsin.txt*
Output File: *pairsout.txt*

Time limit	Memory limit
1 second	256 MB

Statement

Students are screaming at each other. Hiding under computers. Standing on top of computers. Re-enacting sorting algorithms with their pencils. Sitting on the ceiling fans... Walking in you are horrified to find your informatics club wreaking havoc and in a shambles. You realise that the hyperactive students are quite fed up with programming by themselves. They want to program in *pairs*.

You quickly write up draft problems for the world's first Australian Community Informatics Olympiad in Teams (ACIOT). Students will compete in teams of 2. You have N interested students, and you have determined the skill level for each student. The skill level of the team is the sum of the skill levels of the 2 students in that team.

To make things fair, no pair should have a combined skill level less than A, nor should they have a combined skill level more than B. With this in mind, you wish to calculate the **number of valid pairs** you can make from your students.

Input

The first line of input contains 3 integers N A B as described. The next line contains N integers s_1 ... s_N, the skill levels of your N students.

Output

Output 1 integer, the number of valid pairs.

Sample Input 1

```
5 1 12
6 1 5 3 7
```

Sample Output 1

```
9
```

Sample Input 2

```
2 4 4
2 2
```

Sample Output 2

```
1
```

Sample Input 3

```
5 5 7
1 2 3 4 5
```

Sample Output 3

```
6
```

Sample Input 4

```
3 14802 200000
1 1 100000
```

Sample Output 4

```
2
```

Explanation

- For sample input 1, all 10 possible teams have a skill level between 1 and 12 except for the team comprised of students 1 and 5, which would have a skill level of 6 + 7 = 13.
- For sample input 2, there is only one possible team: student 1 and 2, with a combined skill of 2 + 2 = 4. This is not less than A (4) nor more than B (4).
- For sample input 3, there are six possible teams with a combined skill level between 5 and 7: students 1 and 4, 1 and 5, 2 and 3, 2 and 4, 2 and 5, 3 and 4 with combined skill levels of 5, 6, 5, 6, 7, 7 respectively.
- For sample input 4, either student 1 or 2 can be in a team with student 3 for a combined skill of 1 + 100000 = 100001.

Constraints

- $2 \leq N \leq 10^5$
- $0 \leq A \leq B \leq 2 \times 10^5$
- $0 \leq s_i \leq 10^5$ for all i

Subtasks

- For Subtask 1 (20 points), $N \leq 1000$.
- For Subtask 2 (30 points), $s_i = i$ for all i. Sample input 3 is an example of this subtask.
- For Subtask 3 (35 points), $B = 2 \times 10^5$. *This means that the combined skill of any two students will never exceed B.* Sample input 4 is an example of this subtask.
- For Subtask 4 (15 points), No further constraints.