

Do Not Gather! (gatherings)

As vaccinations against COVID-19 are starting all over the world, people seem to keep forgetting the one and only piece of advice they have been given in the last months: “Do Not Gather!”.

To receive their dose, people usually queue up outside the administration center and form a line. Often, though, the minimum interpersonal distance D (measured in centimeters) imposed by law is not respected, enabling possible infections.



Figure 1: An example of how to *not* queue up properly.

Luca was walking and accidentally noted the troubling situation: out of N people in queue at positions P_i , also measured in centimeters starting from the vaccination center, many seem to be in a risky position. How many pairs of people do not respect the distance, i.e. the distance between them is less than the required distance?

📎 Among the attachments of this task you may find a template file `gatherings.*` with a sample incomplete implementation.

Input

The first line contains two integers, N and D . The second line contains N integers P_i .

Output

You need to write a single line with an integer: the number of pairs of people who do not respect the minimum distance.





📎 The answer may not fit into a 32-bit integer: use `long long` in C/C++ and `int64` in Pascal in order to avoid integer overflow. The provided templates are already properly set.

Constraints

- $1 \leq N \leq 100\,000$.
- $1 \leq D \leq 10^9$.
- $0 \leq P_i \leq 10^9$ for each $i = 0 \dots N - 1$.
- Positions are all distinct and are listed from the nearest to the farthest (i.e., $P_i < P_{i+1}$ for each $i = 0 \dots N - 2$).

Scoring

Your program will be tested against several test cases grouped in subtasks. In order to obtain the score of a subtask, your program needs to correctly solve all of its test cases.

- **Subtask 1** (0 points) Examples.

- **Subtask 2** (30 points) $D \leq 10\,000, N \leq 10\,000$.

- **Subtask 3** (30 points) $D \leq 10\,000$.

- **Subtask 4** (40 points) No additional limitations.


Examples

input	output
4 100 20 120 200 300	1
4 200 0 100 150 200	5

Explanation

In the **first sample case** the second and the third person are at distance $200 - 120 = 80$ centimeters which is below 100. All other pairs respect the distance.

In the **second sample case** there are five problematic pairs: the first and the second person (distance 100), the first and the third one (distance 150), the second and the third one (distance 50), the second and the fourth one (distance 100) and the third and the fourth one (distance 50).