

Rock Paper Scissors

The rock-paper-scissors community of Bitopia takes competition very seriously – that is why all players have their own rating value ranging from 0 to 10^9 , indicating how skilled they are at the game. Various community members organize regular tournaments and events open to players at all skill levels. To keep things fair, matches must be between players of similar skill, so every event has the following rule: two players may only participate in an official match if the absolute difference between their ratings is at most D, where D is decided by the tournament hosts.

Task

One such event is currently ongoing. All matches are 1-vs-1, and every player may play at most one official match with each of the other participants, but they may play with as many of the other participants as they want (so long as their ratings are not too far apart). Knowing the ratings of all participating players, and the value of D for this event, what is the maximum number of official matches that may take place?

Input description

The first line of standard input contains two integers N, D ($2 \le N \le 10^6, 0 \le D \le 10^9$), where N is the number of players participating in the event and D is the maximum difference between ratings of two players in an official match, as described above. Each *i*-th of the following N lines contains one integer R_i ($0 \le R_i \le 10^9$) – the rating of the *i*-th player. The ratings are provided in ascending order.

Output description

Your program should print one integer – the maximum number of official matches that may occur during the event.

Centrum Mistrzostwa Informatycznego

Kategoria:

Gremliny (Szkoła Średnia)

Język Programowania: C++/Python

Zadanie:

Rock Paper Scissors

Example

For sample input:

7

Explanation

Notice that there are two different players rated 20. Matches between players with the following ratings may occur:

- 10-20
- 10-20
- 10-110
- 20-20
- 20-110
- 20-110
- 110-121

for a total of 7 matches.





Scoring

If your algorithm solves only some of the test cases, you will be awarded partial points. The table below describes available test groups with additional constraints.

Additional constraints:	Points for the test group:
$N \le 100$	10
$N \le 30000$	30
No additional constraints.	60

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