



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS STANDINGS CUSTOM INVOCATION

C. Balanced Team

time limit per test: 2 seconds memory limit per test: 256 megabytes

You are a coach at your local university. There are n students under your supervision, the programming skill of the i -th student is a_i .

You have to create a team for a new programming competition. As you know, the more students some team has the more probable its victory is! So you have to create a team with the maximum number of students. But you also know that a team should be *balanced*. It means that the programming skill of each pair of students in a created team should differ by no more than 5.

Your task is to report the maximum possible number of students in a balanced team.

Input

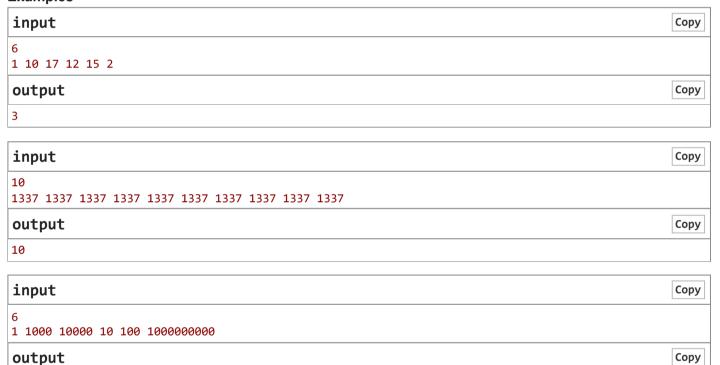
The first line of the input contains one integer n ($1 \le n \le 2 \cdot 10^5$) — the number of students.

The second line of the input contains n integers a_1, a_2, \ldots, a_n ($1 \le a_i \le 10^9$), where a_i is a programming skill of the i-th student.

Output

Print one integer — the maximum possible number of students in a balanced team.

Examples



Note

In the first example you can create a team with skills [12, 17, 15].

In the second example you can take all students in a team because their programming skills are equal.

In the third example you can create a team consisting of a single student (and you cannot create a team consisting of at least two students).

Codeforces Round 544 (Div. 3) Finished Practice

→ Virtual participation Virtual contest is a way to take pa

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest





→ Last submissions		
Submission	Time	Verdict
244620590	Feb/03/2024 02:32	Accepted



→ Contest materials		
 Announcement 	×	
Tutorial	×	

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