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

input Copy

```
6
1 10 17 12 15 2
```

output Copy

```
3
```

input Copy

```
10
1337 1337 1337 1337 1337 1337 1337 1337 1337 1337
```

output Copy

```
10
```

input Copy

```
6
1 1000 10000 10 100 1000000000
```

output Copy

```
1
```

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 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

→ **Clone Contest to Mashup**

You can clone this contest to a mashup.

Clone Contest

→ **Submit?**

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

→ **Last submissions**

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

→ **Problem tags**

sortings two pointers *1200

No tag edit access

→ **Contest materials**

- Announcement
- Tutorial