2358. Maximum Number of Groups Entering a Competition

Description

You are given a positive integer array `grades` which represents the grades of students in a university. You would like to enter **all** these students into a competition in **ordered** non-empty groups, such that the ordering meets the following conditions:

- The sum of the grades of students in the `i th` group is **less than** the sum of the grades of students in the `(i + 1) th` group, for all groups (except the last).
- The total number of students in the `i th` group is **less than** the total number of students in the `(i + 1) th` group, for all groups (except the last).

Return *the **maximum** number of groups that can be formed*.

Example 1:

```
Input: grades = [10,6,12,7,3,5]
Output: 3
Explanation: The following is a possible way to form 3 groups of students:
- 1st group has the students with grades = [12]. Sum of grades: 12. Student count: 1
- 2nd group has the students with grades = [6,7]. Sum of grades: 6 + 7 = 13. Student count: 2
- 3rd group has the students with grades = [10,3,5]. Sum of grades: 10 + 3 + 5 = 18. Student count: 3
It can be shown that it is not possible to form more than 3 groups.
```

Example 2:

```
Input: grades = [8,8]
Output: 1
Explanation: We can only form 1 group, since forming 2 groups would lead to an equal number of students in both groups.
```

Constraints:

- `1 <= grades.length <= 10^5`
- `1 <= grades[i] <= 10^5`