Problem I
Intricate Polygons
Time Limit: 1 Second
Memory Limit: 512 megabytes

On a beautiful sunny day in Dam Sen Park, Mr. Don holds a bag of sticks of various lengths. Mr. Don has realized that, with these sticks, some sticks can be combined to create interesting polygons, while others cannot.

For example, Mr. Don has three sticks in his bag with lengths of 5, 3, and 4, respectively. He knows that with these three sticks, he can arrange them to form a beautiful triangle. However, the previous day, when Mr. Don had four sticks in his bag with lengths of 5, 3, 4, and 20, he knew there was no way to arrange them into a valid quadrilateral.

Here is your task: Help Mr. Don calculate how many different ways to choose sticks from his bag to create different polygons. Two polygons are considered different if at least one stick is used in one polygon but not present in the other, and vice versa.

Input
The first line contains an integer n ($1 \leq n \leq 5000$) – number of sticks in Mr. Don's bag.

The second line contains n integers $l_1, l_2, \ldots, l_n$ ($1 \leq l_i \leq 5000$), which are the lengths of the n corresponding sticks.

Output
The output contains a positive integer, which is the number of different polygons that can be created modulo $10^9 + 7$.

Sample Input	Sample Output	Explanation
4 2 2 2 2	5	There are 4 triangles with sides {2,2,2} and 1 quadrilateral with sides {2,2,2,2}
5 1 2 3 4 5	9	There are 9 polygons {2,3,4}, {2,4,5}, {3,4,5}, {1,2,3,4}, {1,2,3,5}, {1,2,4,5}, {1,3,4,5}, {2,3,4,5}, {1,2,3,4,5}