

# 1711. Count Good Meals

## Description

A **good meal** is a meal that contains **exactly two different food items** with a sum of deliciousness equal to a power of two.

You can pick **any** two different foods to make a good meal.

Given an array of integers `deliciousness` where `deliciousness[i]` is the deliciousness of the `ith` item of food, return *the number of different good meals you can make from this list modulo  $10^9 + 7$* .

Note that items with different indices are considered different even if they have the same deliciousness value.

### Example 1:

**Input:** `deliciousness = [1,3,5,7,9]`

**Output:** 4

**Explanation:** The good meals are (1,3), (1,7), (3,5) and, (7,9).  
Their respective sums are 4, 8, 8, and 16, all of which are powers of 2.

### Example 2:

**Input:** `deliciousness = [1,1,1,3,3,3,7]`

**Output:** 15

**Explanation:** The good meals are (1,1) with 3 ways, (1,3) with 9 ways, and (1,7) with 3 ways.

### Constraints:

- `1 <= deliciousness.length <= 105`
- `0 <= deliciousness[i] <= 220`

