

## Problem I: Incredible Sums

Time Limit: 5 seconds

### Description

Given an array of integers  $a_0, a_1, \dots, a_n$ , Compute:

$$\left( \sum_{1 \leq i < j < k < l \leq n} a_i a_j a_k a_l \right) \bmod (10^9 + 7)$$

### Input

A number of of inputs ( $\leq 200$ ), each with  $N$  ( $0 \leq N \leq 100000$ ), followed by an array of  $N$  integers, each integer  $a_i$  ( $0 \leq a_i \leq 1000000000$ ), on the next line.

### Output

For each input, output the answer on one line.

### Sample Input

```
3
1 2 3
4
1 2 3 4
```

### Sample Output

```
0
24
```