

## Problem B

Find the smallest  $n$ -digit integer consisting only of digits belonging to a given subset of  $1, \dots, 9$  (no zero's) and such that the sum of the squares of its digits is the third power of an integer.

### Input and output

The first line contains an integer  $n$  ( $n \leq 10^5$ ). The second line contains a list of (at most nine) pairwise distinct digits, all different from 0.

Output a single  $n$ -digit integer whose digits belong to this list, the sum of the squares of all digits is the third power of an integer, and this integer is the smallest with this property. You can assume such an integer exists.

### Example

Input:

```
4
2 7 6
```

Output:

```
2667
```