# Pot

**Problem ID:** pot
**CPU Time limit:** 1 secon
**Memory limit:** 1024 MB
**Difficulty:** 1.3

**Author:** Nikola Dmitrovi
**Source:** Croatian Open Competition in Informati 2015/2016, contest #3


The teacher has sent an e-mail to her students with the following task: "Write a program that will determine and output the value of $X$ if given the statement:

$$X = number_1^{pow_1} + number_2^{pow_2} + \ldots + number_N^{pow_N}$$

and it holds that $number_1$, $number_2$ to $number_N$ are integers, and $pow_1$, $pow_2$ to $pow_N$ are one-digit integers." Unfortunately, when the teacher downloaded the task to her computer, the text formatting was lost so the task transformed into a sum of $N$ integers:

$$X = P_1 + P_2 + \ldots + P_N$$

For example, without text formatting, the original task in the form of $X = 21^2 + 125^3$ became a task in the form of $X = 212 + 1253$. Help the teacher by writing a program that will, for given $N$ integers from $P_1$ to $P_N$ determine and output the value of $X$ from the original task.

## Input

The first line of input contains the integer $N$ ($1 \leq N \leq 10$), the number of the addends from the task. Each of the following $N$ lines contains the integer $P_i$ ($10 \leq P_i \leq 9999$, $i = 1, \ldots, N$) from the task.

## Output

The first and only line of output must contain the value of $X$ ($X \leq 1\,000\,000\,000$) from the original task.

### Sample Input 1

```
2
212
1253
```

### Sample Output 1

```
1953566
```

### Sample Input 2

```
5
23
17
43
52
22
```

### Sample Output 2

```
102
```

### Sample Input 3

```
3
213
102
45
```

### Sample Output 3

```
10385
```