2846 - ID Key

Description

To calculate the 4-digit ID key from 13-digit citizen number, you must follow these steps:

1. Find the sum of all digits in the 13-digit citizen number
2. Extract the last 3-digit number of the citizen number and then multiply by 10
3. The ID key is obtained by adding the results from step 1) and step 2). However, if it contains more than 4 digits, you have to extract only 4 last digits, or if it is less than 1,000 (i.e. contains less than 4 digits), you must add 1,000 to obtain the 4-digit ID key.

Input specification

You are given the number of test cases (1 <= N <= 100) in the first line. Then, in the following N lines, each line contains the 13-digit citizen number.

Output specification

Print out, in each line, the 4-digit ID key calculated by the rules described above for each citizen number, respectively.

Sample input

```
4
1234567890123
0213617002001
9998888997899
1099999999999
```

Sample output

```
1281
1033
9100
0090
```

Hint(s)

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