

Convert To Small

Lili is a little girl, little girls love little numbers especially those strictly under 10. She found big numbers that she wants to reduce to small numbers. She needs your help reducing these numbers into small numbers.

She reduces a number by changing it into the sum of its digits, but sometimes this is not good enough for her. Sometimes after she reduce a number once, it is still bigger than 10. She only likes numbers that are smaller than 10.

For example, she find a number 383, she converts it to 14, this is still bigger than 10, so she converts it to 5, which she considers as a little number as it is smaller than 10.

Because she's still a little girl, she needs you to do the grown up stuff and help her figure out the small number she will get as the result after a series of conversion.

Format Input

The first line of the input contains one integer T , the number big numbers Lili found. The next T lines contains integers X_i , the i -th big number.

Format Output

Print T lines, each line is the i -th result of each conversion from big number to small number.

Constraints

$1 \leq T \leq 1000$

$1 \leq X_i \leq 1\,000\,000\,000$

Sample Input 1 (standard input)	Sample Output 1 (standard output)
3 383 8 2000000	5 8 2

Sample Input 2 (standard input)	Sample Output 2 (standard output)
5 66987 348075 34985 8289 700384	9 9 2 9 4

Explanation of Sample 1

383 converts to 14, which converts to 5

8 is already smaller than 10

2000000 converts to 2