Do not print 0

Print "zero" instead of 0.

Input

The first line of the input consist of a single integer number t which determines the number of tests.

In each of next t lines there is a single integer number n.

Constraints

- $0 < t \le 100\,000$
- $0 < n \le 1\,000\,000$

Output

If n is equal to 12345, print "Zero" without quotes.

Else, print the result of n minus 12345.

Example

Input:
3
12349
12345
12340
Output:
4
Zero
-5