

Problem K

Ternary

Input: Standard Input

Output: Standard Output

You will be given a decimal number. You will have to convert it to its ternary (Base 3) equivalent.

Input

The input file contains at most 100 lines of inputs. Each line contains a non-negative decimal integer N ($N < 1000000001$). Input is terminated by a line containing a negative value. This line should not be processed.

Output

For each line of input produce one line of output. This line contains the ternary equivalent of decimal value N .

Sample Input

Output for Sample Input

10	101
100	10201
1000	1101001
-1	

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