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

10
100
1000
-1

## Sample Output

101
10201
1101001

