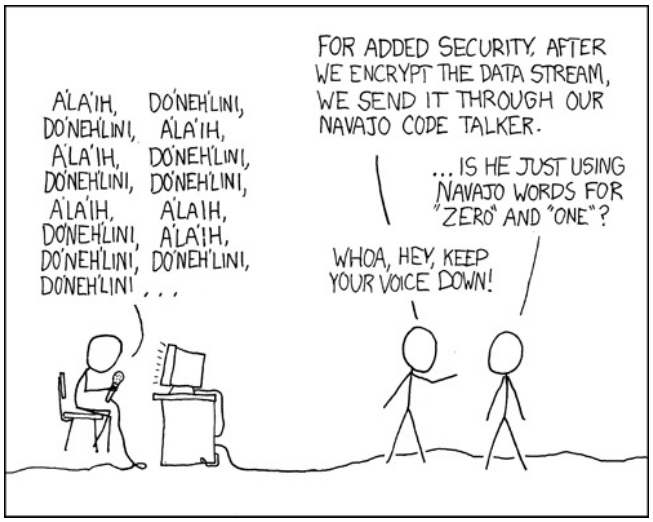
Word to number



Description

You will convert numbers from words to numerals.
The numbers will be nonnegative integers less than one billion. Their word representations will be <number>s according to the following BNF grammar:
<ones> ::= "one" | "two" | "three" | "four" | "five" | "six" | "seven" | "eight" | "nine" <tens-place> ::= "twenty" | "thirty" | "forty" | "fifty" | "sixty" | "seventy" | "eighty" | "ninety" <tens> ::= <ones> | <tens-place> | <tens-place> "-" <ones> | "ten" | "eleven" | "twelve" | "thirteen" | "fourteen" | "fifteen" | "sixteen" | "seventeen" | "eighteen" | "nineteen" <hundreds> ::= <tens> | <ones> " " "hundred" | <ones> " " "hundred" " " <tens> <thousands> ::= <hundreds> | <hundreds> " " "thousand" | <hundreds> " " "thousand" " " <hundreds> <millions> ::= <thousands> | <hundreds> " " "million" | <hundreds> " " "million" " " <thousands> <number> ::= <millions> | "zero"

Input

The input is the word representation of the number on a single line.

Output

Output the decimal representation of the number.

Examples

Input	Input	Input	Input
zero	seventeen	fifty-two	one thousand one
Output	**Output**	**Output**	**Output**
0	17	52	1001

Input (one line)

nine hundred ninety-nine million nine hundred ninety-nine thousand nine hundred ninety-nine

Output

999999999