Simple

After playing his favorite song for the 10th time of the day, Anastas continued writing language compilers. This time he wrote a compiler for a simple language, which he called *Simple*. The language can only support addition, subtraction, multiplication, division (decimal), and assignment. He began to explore what language could do and came up with the following task:

"In the beginning, there is only value v in the variable x.

Each line of the program should look like $(A) = (B)$ (*operation*) (C), where B and C are already defined variables, *operation* is within the set $\{+, -, *, /\}$, and A can be a new variable, with A being assigned the value of the expression ((B) (*operation*) (C)).

Each variable can only be one letter long.

Let a and b be given natural numbers. After the last line of the program in the variable x the value should be equal to $v^{a/b}$"

Unfortunately, he couldn't solve it and turned to you for help.

Input

The single line of the file **simple.in** contains the numbers a and b

Output

On the first line of the file **simple.out**, print the number of lines(**no more than 5000**) of the program, and on the following lines, print the program itself.

The answer will be considered as correct if the absolute or relative error between your and the correct value is $\leq 10^{-9}$

If at runtime you try to divide by 0, use an undeclared variable, or get an absolute value greater than 10^{300}, you will get a wrong answer.

Constraint

$0 < a, b < 64$

$0 < v < 256$ and v is a natural number

Time limit: 0.4 sec.
Memory limit: 256 MB.

Sample test

Input (simple.in)	Output (simple.out)
5 1	3

	$y = x * x$
	$y = y * y$
	$x = y * x$