Problem I. Salată de Vinete

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	1024 mebibytes

Salata de vinete is a classic Romanian eggplant salad made from roasted eggplants mashed into a creamy spread, usually mixed with mayonnaise, sunflower oil, and onions, and served chilled with fresh bread or tomatoes.

You prepared Salată de vinete for dinner. Now you want to serve everyone, and naturally, each person wants a lot of Salată de vinete (you make it very well). Specifically, person i wants the exact quantity a_i of the salată. Because of this, you decided to tell your kitchen robot to help you serve the salată. There will be 26 guests, denoted for brevity with lowercase English letters: `a`, `b`, `c`, ..., `z`. The robot works in a special way:

- First, the robot puts some quantity x in one bowl. This is identified with the instruction "a=x" where a is one of the 26 identifiers and x is a constant integer (for example, "`a=8`", "`b=0`", "`z=2147483647`").
- Then the robot can do the following at most 329 times: measure the quantity of salată in one bowl and add that quantity to another bowl (or to the same bowl). This is identified with the instruction "a+=b" where a and b are identifiers (for example, "`a+=a`", "`b+=z`", "`x+=y`").

Even though your recipe is amazing, you now need to program the robot to put the right quantity of Salată de vinete in each bowl. Note that you are not required to minimize the number of operations.

Input

The first line of input will contain 26 integers separated by spaces: the quantities a_i the robot should place in each bowl ($0 \le a_i \le 2^{31} - 1$). The sum of a_i is strictly positive.

Output

On the first line, print the number of instructions k for the robot. Note k should be at most 330 according to the statement.

On each of the following k lines, print one instruction in the format "a=x" (first instruction), where a is a lowercase English letter and x is a constant, or "a+=b" (other instructions), where both a and b are lowercase English letters.

Example

standard input
1 2 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
standard output
7 a=1 b+=a b+=a c+=a c+=a c+=a z+=a