

Problem D. Bananaflood

Input file: standard input
Output file: standard output
Time limit: 0.5 seconds
Memory limit: 16 megabytes

After having made wads of cash from his radioactive banana business, Kraw the Krow has bought many more plots of land to increase production of his radioactive bananas in order to strengthen his banana empire. Soon enough, all the cows around the world would be addicted to eating his radioactively delicious bananas.

Unfortunately, Kraw the Krow has not taken into account what happens when you plant too many bananas. Too many *mutated* bananas. During a thunderstorm in the monsoon season, excessive amounts of rain has caused most of Kraw the Krow's bananas to fall, and as a result Kraw the Krow's house was hit by a banana flood, causing his house to be full of soggy, radioactive bananas. If too many of Kraw the Krow's bananas were to be placed in close proximity of one another when they are soggy, they could trigger a nuclear meltdown which would certainly tar Kraw's environmentally friendly corporate image.

Fortunately, Kraw the Krow has three nuclear moderators which he could use to salvage the situation. Each nuclear moderator has an efficacy value. The first nuclear moderator has efficacy value A , the second nuclear moderator has efficacy value B and the third nuclear moderator has efficacy value C . To stop the nuclear meltdown, Kraw the Krow has to use each of the three nuclear moderators individually in some sequence which maximizes the total efficacy of the nuclear moderators.

Due to the nonlinear mechanics of self-amplifying mean field transients produced by weakly coupled squeezed eigenflavour interactions in the virtual phi plus field, the total efficacy of the nuclear moderators is given by the equation:

$$\text{total efficacy} = X^{YZ}$$

where X is the efficacy of the first nuclear moderator used, Y is the efficacy of the second nuclear moderator used and Z is the efficacy of the third nuclear moderator used.

Help Kraw the Krow salvage his house and banana empire by determining the order in which he should use his nuclear moderators.

Input

The input contains 3 numbers A , B and C , the individual efficacies of the three nuclear moderators. Each number will be given to exactly two decimal places.

Output

Output the order in which the nuclear moderators are to be used. For example, if the second nuclear moderator is to be used first, then the third nuclear moderator, then the first nuclear moderator, you should output 231. If there are multiple answers, output the one that is lexicographically the smallest. See the examples for a better understanding.

Examples

| standard input | standard output |
|----------------|-----------------|
| 3.00 4.00 2.00 | 312 |
| 1.00 1.00 1.00 | 123 |

Note

In the first sample case, using the third nuclear moderator followed by the first and the second would result in the value of the total efficacy to be $2^{3^4} = 2^{81}$. This is the greatest possible value.

In the second sample case, no matter in which order Kraw the Krow uses his nuclear moderators, the value of the total efficacy will be 1. Hence the output is the lexicographically smallest arrangement, which is 123.

Scoring

Your program will be tested on 5 sets of input instances as follows:

Subtask 1 (points: 3)

$$0 < A, B \leq 10^{10}. C = 1.$$

Subtask 2 (points: 2)

$$0 < A, B, C \leq 3.$$

Subtask 3 (points: 30)

$$0 < A, B, C \leq 200.$$

Subtask 4 (points: 65)

$$0 < A, B, C \leq 10^{10}.$$

Subtask 5 (points: 0)

Refer to sample input and output.