

L Lots of Land

Time limit: 1s

Farmer Robert has been running a very successful cereal farm for many years. Now he wants to diversify his business and get into growing potatoes. To this end, he has bought a new plot of land on which he plans to plant the potatoes. This field is a rectangle and is exactly ℓ metres long and w metres wide.



Some potatoes. Picture by Wounds_and_Cracks, Pixabay

Since Robert is new to the potato business, he has initially purchased n different potato varieties to try out in the first year. He plans to divide his plot of land into n parts of equal area and plant one of the varieties on each. To make it easier for him to work the fields with his tractor, each new piece of land should itself be a rectangle and have integer side lengths. Help Robert to find a suitable division of his field.

Input

The input consists of:

- One line with three integers ℓ, w, n ($1 \leq \ell, w \leq 100, 1 \leq n \leq 26$), the length and width of Robert’s field and the number of potato varieties.

Output

If there is no solution, output `impossible`. Otherwise output ℓ lines, each with w uppercase letters, describing a possible division of Robert’s field. There should be the same number of occurrences of each of the first n letters of the English alphabet, and for each letter, its occurrences should form a single rectangular region. If there is more than one solution, any one of them will be accepted.

Sample Input 1	Sample Output 1
4 4 4	AAAA BBCC BBCC DDDD

Sample Input 2	Sample Output 2
6 15 9	GGGGGBBBBBBBBBB GGGGGAAAAAAAAAA IIIIIIIIIIIEEEEE FFFFFFFFFFFFEEEE CCCCDDDDDDHHHHH CCCCDDDDDDHHHHH

Sample Input 3

100 100 26

Sample Output 3

impossible
