Problem G: Product transformation

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Statement:

Consider an array with elements all being the same number . Define the product transformation right to it for, with the last number remaining the same. For example, if we start with array with and after one product transformation*,* and after two product transformations*.* Your simple task is to calculate array after product transformations. Since the numbers can get quite big you should output them modulo.

***Input:***

The first and only line of input contains four integers.

***Output:***

You should output the array from left to right, each number in a new line.

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| ***Example input:*** | ***Example output:*** |
| 2 2 2 7 | 1  2 |

***Example explanation:***

After 2 transformations.

***Constraints:***

* The multiplicative order of a number modulo is prime.

***Time and memory limit: 1s / 64 MB***

***Note:***

The multiplicative order of a number modulo is the smallest natural number such that For example.

Solution and analysis:

#TODO