# Problem 1 – Melrah Shake

You are given a **string** of random characters, and a **pattern** of random characters. You need to “shake off” (**remove**) all of the **border** occurrences of that pattern, in other words, the **very** **first** **match** and the **very last match** of the pattern you find in the string.

When you successfully shake off a match, you **remove** from the pattern the character which corresponds to the **index** equal to **the pattern’s length / 2**. Then you continue to shake off the border occurrences of the new pattern until the pattern becomes **empty** or until there is **less** than the - needed for shake, matches in the remaining string.

In case you have found at least **two** matches, and you have successfully shaken them off, you print “Shaked it.” on the console. Otherwise you print “No shake.”, the remains of the main string, and you end the program. See the examples for more info.

### Input

* The input will consist only of two lines.
* On the first line you will get a string of random characters.
* On the second line you will receive the pattern and that ends the input sequence.

### Output

* You must print “Shaked it.” for every time you successfully do the melrah shake.
* If the melrah shake fails, you print “No shake.”, and on the next line you print what has remained of the main string.

### Constraints

* The two strings may contain **ANY** ASCII character.
* Allowed time/memory: 250ms/16MB.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| astalavista baby  sta | Shaked it.  No shake.  alavi baby |

|  |  |
| --- | --- |
| **Input** | **Output** |
| ##mtm!!mm.mm\*mtm.#  mtm | Shaked it.  Shaked it.  No shake.  ##!!.\*.# |