

OKVIRI

“Peter Pan frames” are a way of decorating text in which every character is framed by a diamond-shaped frame, with frames of neighbouring characters interleaving. A Peter Pan frame for one letter looks like this ('X' is the letter we are framing):

```
..#..  
.#.#.  
#.X.#  
.#.#.  
..#..
```

However, such a framing would be somewhat dull so we'll frame every third letter using a “Wendy frame”. A Wendy frame looks like this:

```
.. * ..  
.*.*.  
*.X.*  
.*.*.  
.. * ..
```

When a Wendy frame interleaves with a Peter Pan frame, the Wendy frame (being much nicer) is put on top. For an example of the interleaving check the sample cases.

Input.

The first and only line of input will contain at most 15 capital letters of the English alphabet.

Output.

Output the word written using Peter Pan and Wendy frames on 5 lines.

Sample tests.

N	stdin	stdout
1	A	..#.. .#.#. #.A.# .#.#. ..#..
2	DOG	..#...#...*.. .#.#.#.#.*.*. #.D.#.O.*.G.*

		..###.*. ..##*..
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