Tree

Example task Available memory: 256 MB. Maximum running time: 1 s.

As we all know, every Christmas tree consists of exactly three parts, in their descending order: upper part, lower part, and the trunk. Upper and lower part of tree are represented by an isosceles triangle 1 character wide at the top and growing by 1 character in both directions (left and right) with each line, going downwards.

A Christmas tree will be said to be of size n if its upper part is n lines tall and its lower part is n+1 lines tall. The trunk is always 2 characters tall and 1 character wide, located on the tree's vertical axis, regardless of the overall tree size. In this problem you'll be asked to print a Christmas tree of given size, represented by hashes on a dotted background.

Input

A single integer n ($n \le 1000$) denoting the size of the tree.

Output

If n = 0, print only one line saying "Too small to exist".

Otherwise, print $2 \cdot n + 3$ lines, $2 \cdot n + 1$ characters each, representing a drawing of an n-sized Christmas tree, as described in the problem statement. Check out the examples in order to get a better understanding of the output format.

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Example

For the input data:

the correct result is:

...#...
..####..
...####..
...####..
..#####..
..#####..
..#####..