

Problem A. Absurd Triangle 2

In the world of text files, it is almost impossible to draw a triangle. But oh my, your younger sister wants a triangle! This is why you have to write a program that draws a triangle in the standard output.

The triangle you decided to draw is a isosceles triangle, which has base $2n - 1$ and height n . Therefore, you have to print n lines, each containing $2n - 1$ characters. The i -th line among them should contain $2i - 1$ question marks ('?') in the center of the line, to tell your sister that drawing a triangle in a text world is absurd. Other characters in that line should be a dot ('.')

Input

Your input consists of an arbitrary number of records, but no more than 50.

Each record is a line that contains an integer n ($1 \leq n \leq 100$).

The end of input is indicated by a line containing only the value -1 .

Output

For each input record, print n lines that contains a triangle given in the statement.

Example

Standard input	Standard output
4 7 -1	...?... ..???.. .????? ????????.....???.....?????..... ...????????... ..??????????.. .????????????? .????????????? ???????????????

Time Limit

1 second.