Spirals   P44243_en

Write a program that prints "spirals" of size $n \times n$, as it is shown in the examples.

Input

Input consists of a sequence of strictly positive natural numbers, ended with zero.

Output

For each n, print a spiral of size $n \times n$. Note that in the bottom row and in the right column there are only 'X's. Print an empty line after each spiral.

Observation

A matrix is not needed to solve this problem, but use it for simplicity.

Sample input 1

```
4
6
7
0
```

Sample output 1

```
.XXX
.X.X
...X
XXXX

.XXXXX
.X...X
.X.X.X
.XXX.X
.....X
XXXXXX

.XXXXXX
.X....X
.X.XX.X
.X..X.X
.XXXX.X
......X
XXXXXXX
```

Problem information

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