Your task is to write a program that prints “spirals” of size $n \times n$, as it is shown in the examples.

Input
The input consists of a sequence of natural numbers ended with zero.

Output
For each $n$, your program must print a spiral of size $n \times n$. Notice that in the row of the bottom and the column on the right there only are ‘X’ s. Print a line in white after each spiral.

Sample input
4
6
7
0

Sample output
.xxx
.x.x
...x
xxxx

.xxxxx
.x...x
.x.x.x
.xxx.x
.....x
xxxxxx

.xxxxx
.x...x
.x.x.x
.xxx.x
....x
xxxxxx

Observation
Although it is not essential use a matrix to solve this problem, do it for simplicity.