

JudgeIt!

The Virtual Learning Environment for Computer Programming

Spirals

P59112_en

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
```

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

Observation

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

Problem information

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Generation : 2010-07-30 10:18:34

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