Bows X70418_en

Write bows like the ones described in the examples.
Note: It is not allowed to use functions, vectors and any other way to store massive data. The solution must deal with the input data sequentially without storing arbitrarily large intermediate memory.

Input

The input has several cases, each one described in one line. For each case, we have a natural number $n \geq 1$.

Output

For each case, write the corresponding bow. Note that there are not white spaces at the end of each line. Separate two consecutive cases with a blank line.

Sample input

```
1
2
3
4
5
```

Sample output

```
X

XXX
 X
XXX

XXXXX
 XXX
  X
 XXX
XXXXX

XXXXXXX
 XXXXX
  XXX
   X
  XXX
 XXXXX
XXXXXXX

XXXXXXXXX
 XXXXXXX
  XXXXX
   XXX
    X
   XXX
  XXXXX
 XXXXXXX
XXXXXXXXX
```

Problem information

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