Problem 2: Building the Christmas Tree

Time Limit: 1s

Memory Limit: 128MB

Jacob is in a very festive mood, and wants to wish everyone a Merry Christmas. He decides to build a Christmas tree out of asterisks (*). The tree will be N sections tall where each section is 4 lines tall. The first section will be 1 asterisk, then 3, then 7, then 11. The first line of each section after the first will start with 6 lesson asterisks than the last line of the previous section, then increase in the same pattern of the first section. After the N sections, the base of the tree will be 5 lines tall and 3 hashtags (*) wide. The tree must be centered in the output.

Constraints

 $1 \le N \le 100$

Input Specification

There will be one line of input, containing the integer N.

Output Specification

Output the Christmas tree as described above.

Sample Input

3

Sample Output

```
***
    *****
   *****
    *****
   ******
  ******
 ******
   ******
  ******
 ******
******
     ###
     ###
     ###
     ###
     ###
```