

Problem J: Draw a Triangle

Write a program which prints a figure that looks like the following figure. The first figure shown would represent the output for an input of 11. That is, there are eleven rows. Each row is composed of the digit that corresponds to the row, except that when we get past the one-digit numbers, we use an asterisk instead of the digit. Each row contains exactly $2 * N$ digits or asterisks, where N corresponds to the row number, with row numbers beginning with the highest number at the top -- in other words, there are 22 asterisks in the first row, 20 asterisks in the second, then 18 nines in the third row, etc. The figure must be centered for every row, relative to the top (longest) row.

Write your program to accept multiple data sets from a file named “**j.in**”. Each data set consists of one single integer, which specifies the number of rows. Begin each output triangle with the input value, labeled as shown. Follow the input value with a blank line. Each new triangle should be separated from the previous one by three blank lines. NOTE: the bold and italicized statements in the output section are to clarify where blank lines go – they should not be printed as part of your output.

Continue processing until the program encounters a negative input – that will be the sentinel (in other words, that’s when you should quit.) No input value will ever be larger than 50.

Sample Input

```
11
2
-1
```

Corresponding Output:

```
Input: 11
_ blank line
*****
*****
9999999999999999
8888888888888888
77777777777777
66666666666666
5555555555
44444444
333333
2222
11
_ blank line one
_ blank line two
_ blank line three
Input: 2
_ blank line
2222
11
_ blank line one
_ blank line two
_ blank line three
```